



STORES PURCHASE COMMITTEE.

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# REPORT

OF THE

# STORES PURCHASE COMMITTEE

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VOLUME I.

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STORES PURCHASE COMMITTEE.

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# REPORT

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# STORES PURCHASE COMMITTEE

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VOLUME I.

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# REPORT OF THE STORES PURCHASE COMMITTEE (1919-1920.)

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REPORT  
OF THE  
STORES PURCHASE COMMITTEE.  
(1919-1920)

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CHAPTER I.

INTRODUCTORY.

The origin, the personnel, and the terms of reference of the Stores Purchase Committee are set out in Resolution No. B-506-11 of the Government of India, dated 5th December 1919, published in the Gazette of India of the 6th December 1919 and here reproduced at length:—

Origin of  
Committee.

“The most obvious and direct form of assistance which the Government of India can give to the industries of the country is by the purchase of supplies required for the public services so far as possible in the country itself. This principle is already clearly expressed in the existing Stores Rules, although their key note is economy, an essential factor in any scheme for the purchase of Government stores; but indenting officers have in practice been too often deterred by the risk involved in purchasing in India in the absence of an expert purchasing and inspecting agency. It follows, therefore, that the constitution of a fully equipped stores agency in this country is a very important item in the policy of industrial improvement on which the Government of India are now embarked.

“2. The foregoing principles were set forth by the Indian Industrial Commission, accepted by the Government of India and approved by the Secretary of State; they have already been put into practice to a limited extent under war conditions by the Indian Munitions Board and the time has now come to give them permanent effect. The Government of India have, therefore, with the sanction of the Secretary of State, decided on the appointment of a Committee to work out a detailed scheme.

“3. There are, however, other factors which must be considered in framing any such scheme. In the first place, the provincial Governments have generally expressed a desire for some measure of freedom in arranging for their own purchases, although they recognise the assistance that the creation of an efficient central purchasing and inspecting department could afford, even to the largest and best equipped provincial Stores department. Although from the point of view of the producer provincial

Governments are not individually very important purchasers in comparison with the large consuming departments of the Government of India, yet their demands are on a sufficient scale to make the waste of public money, which inevitably attends inexpert purchase and ineffective inspection, run into considerable figures; and this is bound to lead in the long run to dissatisfaction with local sources of supply. It will be for the Committee, in consultation with the officers of Local Governments and with private suppliers, to devise a system which will, so far as possible, meet the wishes of Local Governments, while securing to the fullest extent practicable the great advantages of centralised purchase, thereby eliminating competition between the different Government agencies, and of an expert and highly specialised inspecting agency, whose advice and assistance will be of no less value to the private manufacturer than to the Government indenter.

"4. The great railways of India, whether Company or Government lines, are large consumers of stores, and have, therefore, found it necessary to create their own agencies for holding stocks, and for effecting local purchases, the latter being often on a very considerable scale. There is, however, at present no agency for ascertaining whether stores bought through the Director General of Stores could have been obtained in India; nor do the railways possess any specialised purchasing or inspecting agency for the different classes of articles which they require; but they are able to rely to some extent on the Superintendent of Local Manufactures and on the Test House at Alipore to check samples of articles locally obtained. The usefulness of the institution has been considerable, though limited in direction; and proposals are on foot for establishing another test house in Bombay. The Government of India, who have large financial interests in railways, desire to have before them clear information regarding the probable benefits which railways could expect from the assistance and advice of a fully equipped stores agency, and as to the lines on which that assistance could be most advantageously afforded. In this connection it will be desirable for the Committee to frame proposals for the future control, duties and equipment of the existing test house and for the provision of additional test houses if necessary.

"5. The method of providing military stores is a matter which will be doubtless considered by the Committee, which has been appointed to report on the administration and organisation of the Army in India. This Committee will derive great assistance from the conclusions of an expert body such as that which is being appointed under this Resolution; and the Government of India consider that the most convenient procedure will be for the Indian

Stores Committee to proceed with their enquiries on the assumption that the military authorities will require to be provided with stores purchased in India under much the same conditions as other departments of the Government of India; but to ascertain from time to time the views of the Committee on the Army in India, and have regard in framing their own proposals, so far as appears to them proper and feasible, to the views of that Committee.

"6. The Government of India have had under consideration the question of the purchase of food and fodder for the Army. It has, however, been decided not to include this question within the scope of the present enquiry.

"7. The Government of India have decided to constitute a Committee to enquire into the matters indicated in this Resolution, and to frame a definite and so far as possible a detailed scheme for the purchase and inspection of stores in India. Certain general principles have been, it will be observed, accepted by the Government of India and the Secretary of State. It will not be necessary for the Committee to discuss these further; and they should concentrate their attention on the difficult and complicated task of devising a scheme which will as far as possible meet the needs of the different interests concerned, while keeping fully in view the fundamental principles of efficiency and economy.

"8. The Committee will consist of the following gentlemen:—

*President:*

- "1. Mr. F. D. Couchman, M.I.C.E., Member, Railway Board.

*Members:*

- "2. Mr. G. H. Collier, C.I.E., Director General of Stores, India Office, London.
- "3. Mr. F. Palmer, C.I.E., M.I.C.E., M.A.S.C.E., F.R.G.S., late Chief Engineer, Port of London Authority.
- "4. Colonel H. A. K. Jennings, C.I.E., Inspector of Quartermaster General's Services.
- "5. Lieutenant-Colonel C. C. H. Hogg, C.M.G., R.E., Superintending Engineer and Secretary to the Hon'ble the Agent to the Governor-General in Rajputana in the Public Works Department.
- "6. Mr. H. N. Heseltine, C.I.E., Accountant General, Railways (*retired*).
- "7. Mr. A. W. Dods, of Messrs. Burn and Co., Calcutta.
- "8. Rai Bahadur Lala Milki Ram, Chief Store-Keeper, Oudh and Rohilkhand Railway (*retired*).

"9. Mr. Lalji Naranji, of Messrs. Lalji Naranji and Co., Managing Agents, the Jupiter General Insurance Co., Ltd., Bombay.

" Mr. J. C. Highet, Assistant Secretary, Railway Board, has been appointed Secretary to the Committee.

" 9. The terms of reference are as follows :—

" In view of the necessity of encouraging Indian industries, while at the same time securing economy and efficiency in the purchase of Government requirements, the Committee should enquire and report :—

" (a) what measures are required to enable the Departments of the Government of India and of Local Governments to obtain their requirements as far as possible in India, and what central and local agencies for purchase and inspection should be constituted;

" (b) what should be the relations of such agencies with one another and with the Stores Department of the India Office, or such other purchasing organisation in England as may hereafter take the place of that Department;

" (c) what modifications of the Stores Rules will the scheme, recommended by the Committee, necessitate."

#### Changes in personnel.

2. Mr. Palmer's engagements rendered it impossible for him to join the Committee as originally intended, and it was therefore arranged that he should appear as a witness. In losing his services the Committee were deprived of the technical knowledge and assistance of one whose experience in India as a Railway Engineer and as Chief Engineer, Calcutta Port Trust, and in England as Chief Engineer, Port of London Authority, and as one of the Consulting Engineers to the India Office, would have been invaluable to them in considering the difficult problems that arose during their investigations. The Committee also suffered a serious loss when the services of Mr. Heseltine, the only member possessing expert financial knowledge, were withdrawn by Government in February 1920 for employment on other duties which they considered more immediately called for his special qualifications. Mr. Heseltine's intimate knowledge of matters of personnel and establishment would have been of the greatest assistance in appreciating the problems of recruitment of staff, nature and pay of the various appointments, flow of promotion, and other cognate matters affecting our proposals for the new department, and we experienced considerable difficulty in this respect in his absence. The inconvenience was greatly increased by the fact that, as it was understood that his removal from the Committee would be temporary only, no steps were taken to replace him by a suitable substitute until the 1st May 1920, when Mr. T. Ryan, a Member of the Board of Industries and Munitions, was appointed a member of the Committee.

3. Other engagements necessitated Mr. Collier's absence from the Committee during the greater part of our first visit to Calcutta and our visit to Rangoon. He was also unable to remain in India after June 1920 as he felt it to be necessary for him to resume his duties at the India Office, and he has therefore been unable to sign the report, the substance of which however in all material points had already been embodied in a draft before his departure. He has recorded the extent of his agreement with, and divergence from, the majority of the Committee in the separate memorandum by himself and Mr. Ryan which is appended to the report. With these exceptions the constitution of the Committee remained unchanged throughout its proceedings; but its work was further interfered with by the labour unrest, which necessitated the absence on several occasions of the commercial members, and by an accident to Sir Francis Couchman at Jamshedpur which confined him to hospital in Calcutta for a fortnight, and practically removed him from the Committee for some three weeks at an important stage.

Memorandum  
by Messrs.  
Collier  
and Ryan.

4. Prior to the assembly of the Committee a questionnaire (reproduced in the separate volume of evidence) was prepared in the office of the Indian Munitions Board, and copies were distributed to a large number of officials and commercial men, nominated by departments of the Government of India, Local Governments and Administrations, Chambers of Commerce, Trade Associations, etc., as well as to certain representatives of Indian public opinion; the list was subsequently added to by the Committee. Replies were received from nearly all of those addressed, and the majority were further examined in person. A list of the witnesses is given in Appendix A to this report; and the evidence received has been printed in a separate volume.

Preliminary  
work.

5. In order that the Committee might be in a position to appreciate the amount of money annually spent on stores, the Indian Munitions Board called on all Imperial Departments, Local Governments, and Railway Administrations, to furnish returns showing their expenditure year by year from 1910-11 onwards under the following headings:—

Returns of  
expenditure.

- (a) Imported stores locally purchased ;
- (b) Produce of India :
  - (i) from government factories,
  - (ii) from private dealers;
- (c) Stores obtained through the Director General of Stores ;

(d) Stores purchased direct from outside India. Tables compiled from these returns will be found in Appendix D.

6. The Committee assembled at Calcutta on the 17th December 1919 and, after devoting a month to preliminary organisation, local enquiries and the examination of witnesses, proceeded to tour in accordance with the following itinerary:—

Method of  
enquiry.

Rangoon,	arrival	15th	January	1920.
Madras	"	27th	"	"
Bombay	"	5th	February	"

Nagpur, arrival	18th February	1920.
Jamshedpur „	21st „	„
Calcutta „	22nd „	„
Cawnpore „	3rd March	„
Lucknow „	7th „	„
Lahore „	11th „	„
Delhi „	22nd „	„
Simla „	24th „	„

In the course of this tour the following institutions and works were visited; the special thanks of the Committee are due to the proprietors and others who kindly gave access to their works, conducted the members round, and explained the various processes:—

*Calcutta—*

Gun and Shell Factory, Cossipore.  
 Small Arms Ammunition Factory, Dum Dum.  
 Munitions Inspection Depot, Hastings.  
 Howrah Iron Works—Messrs. Burn and Company.  
 Industrial Exhibition.  
 Test House and Laboratory, Alipore.

*Madras—*

Buckingham Mills.  
 Medical Store Depot.  
 Chrome Leather Company's Tannery.  
 Messrs. P. Orr and Sons, Scientific Instrument Manufacturers.

*Bombay—*

Government Dockyard.

*Jamshedpur—*

Messrs. The Tata Iron and Steel Company's Works.

*Lahore—*

Glass Works—Messrs. Mehar Singh Sapuran Singh.

Government Turpentine Factory, Jallo.

Army in India  
Committee.

7. Following the direction contained in paragraph 5 of the Resolution, quoted at the beginning of this chapter, touch was maintained with the Army in India Committee, and towards the end of January 1920, General Jennings specially visited that Committee in Delhi in this connection. It may be mentioned at once that we were advised that the provisional view of the Army in India Committee was that the Army should make full use of the proposed Indian stores purchasing agency; and it was ascertained by cablegram in May 1920 that the same opinion was maintained.

Co-opted  
members.

8. In order that we might have the benefit of local knowledge and experience, Local Governments nominated one or more officers to be co-opted as members when witnesses from their respective provinces

were being examined. The following gentlemen, to all of whom we are indebted for valuable assistance, and several of whom also wrote special memoranda for our guidance, were co-opted in this manner, and acted temporarily as our colleagues :—

For Bengal ...	Mr. D. B. Meek, M.A., B.Sc., Director of Industries, Bengal.
For Assam ...	Rai Kanak Lal Barna Bahadur, B.L., Director of Industries, Assam.
For Burma ...	Mr. J. P. Hardiman, B.A., I.C.S., Commissioner, Meiktila Division.  Mr. F. Reilly Collins, M.I.C.E., M.C.I., Superintending Engineer. Rangoon Circle.
For Madras ...	The Hon'ble Mr. W. J. J. Howley, A.M.I.C.E., Chief Engineer and Secretary to Government, Public Works Department (General and Irrigation).  The Hon'ble Mr. A. Y. G. Campbell, C.I.E., I.C.S., Director of Industries.
For Bombay ...	Mr. E. M. Proes, A.M.I.C.E., Joint Secretary to Government. Public Works Department.  Mr. R. D. Bell, C.I.E., M.A., B.Sc., I.C.S., Director of Industries.
For the Central Provinces.	Mr. A. L. Hoyle, I.C.S., Director of Industries.
For the United Provinces.	The Hon'ble Mr. P. H. Clutterbuck, C.I.E., C.B.E., V.D., Chief Conservator of Forests, United Provinces.
For the Punjab	The Hon'ble Mr. C. A. H. Townsend, B.A., I.C.S., Director of Industries, Punjab.

9. During our tour, we received cordial co-operation from the local authorities and we desire to acknowledge our obligations to them for their assistance. We also wish to record our indebtedness to all who, at the expense of time and labour, furnished us with written memoranda of their views, or gave oral evidence before us; and our appreciation of the willing assistance afforded us by all officers of Government in the difficult task of framing a scheme to meet the different interests involved. The completion of our duties and the submission of our report has taken a few weeks longer than was at first anticipated. This, however, is not surprising in view of the important changes in personnel and other unforeseen contingencies mentioned in paragraphs 2 to 5 above. The contentious nature of the subject with which we have been dealing, described in the Resolution appointing the Committee as our "difficult and complicated task", and the diverse views received from witnesses, have prevented us from presenting an entirely unanimous report, notwithstanding the care and attention we have devoted to the subject. Throughout our proceedings, both on tour and subsequently at headquarters, we have received valuable assistance from our Secretary, Mr. J. C. Highet, who has materially lightened our labours and we desire to record our cordial appreciation of the assistance rendered by him.

Assistance  
received.





## CHAPTER II.

## SUBJECT MATTER AND SCOPE OF THE ENQUIRY.

10. The question before us relates to the purchase of stores required by government departments in India, and possibly by cognate bodies. The supply of food and fodder for the Army has been specifically excluded from our enquiry, and we have also left out of consideration articles which are commonly procured in all parts of India of local origin, such as bricks, lime, stone, sand, ballast, basket work, and common furniture. This leaves for consideration the requirements indicated in the tables set out in Appendix D to the report; though the figures include information regarding purchases of coal and stationery, we may at once mention that in view of the existence of efficient and self-contained departments specially organised for the purchase and inspection of supplies of those kinds, with which it would not be advantageous to interfere, we have been led to exclude these categories of stores also from the scope of our proposals. The tables cover expenditure from 1910 to 1919 inclusive, and thus comprise periods both of peace and war. They have been framed so as to show the incidence of expenditure between the Imperial and Provincial Governments and State Railway Administrations; the distribution of expenditure between India and England; and the relative outlay on certain groups of commodities. We invite particular attention to the explanatory notes prefixed to the tables which, for the reasons therein explained, must be regarded as illustrative and comparative rather than as affording accurate statistics of expenditure. The abstract, on the opposite page, from the figures in Table I will afford a clear idea of the relative importance of the purchases made by the principal government consumers, and of the sources of supply as hitherto utilised.

Statistics.

11. In respect of the stores to which these figures relate we have to consider the existing methods of purchase, and how far it is desirable to modify them or introduce new methods in the light of our terms of reference, so as to achieve the object of Government, namely, the encouragement of Indian industries while maintaining, and if practicable increasing, economy and efficiency in the purchasing procedure. From the striking variations in the relative quantities of stores obtained from the several sources of supply, occasioned by the change from peace to war conditions, it will be manifest how great may be the effects of an alteration of the stores purchase policy of Government. The abstract referred to in paragraph 10 shows that the total expenditure on stores by government departments and state-worked railways amounted to 9½ and 14 crores per annum in the pre-war (1910-11 to 1913-14) and war (1914-15 to 1918-19) periods respectively; since the returns are admittedly not complete the figures are an under, rather than an over, estimate. The returns from company-worked railways for the pre-war period are unfortunately only available for two railways, but we shall not perhaps be far wrong in assuming the annual expenditure to be ten crores, as for the war period. Now although company-worked railways are not bound

Influence of  
policy.

by the Stores Rules of the Government of India, we may take it for granted that in actual practice they buy their stores under conditions similar to those governing the purchases of state-worked railways, but substituting their Home Boards for the Director General of Stores; this assumption is borne out by the percentages given for the war period in Table II where the proportionate expenditure on imported stores, produce of India, and produce of England, by the two groups of railways differs by little over five per cent. We may therefore take the percentages for the grand totals in Table II as showing, with fair approximation, the incidence of expenditure on stores by Indian Government and Railway Administrations under the three main heads as follows:—

Source of Supply.	1910-14.	1914-19.
	Per cent.	Per cent.
Local purchase of imported stores ...	9	18
Produce of India including government factories ... ..	41	52
Director General of Stores or Home Board of company-worked railways.	50	30

Generally speaking then, the result of the war has been to double the proportion of imported stores locally purchased; to increase by 25 per cent the amount spent on produce of India; and to reduce the amounts obtained from England from one-half to one-third of the total.

Dependence  
of Imperial  
Department  
on Store  
Department  
of India  
Office.

12. Turning to branches of the Administration, we find that departments of the Government of India depend, to a very much larger extent than those of Local Governments, on the Director General of Stores, India Office, for their supplies; this is only natural seeing that they include the great technical departments, such as the Army, State Railways and Telegraphs. We find that Local Governments, as a whole, are relatively the largest purchasers of imported stores in the country and that they procured only 20 and 10 per cent of their stores, in the pre-war and war periods respectively, through the India Office; even this percentage is influenced by the expenditure in England on supplies of paper and stationery by the Governments of Madras and Bombay. An analysis of provincial expenditure for two provinces for which details are available shows that 42 per cent is due to expenditure in the Public Works Department, and that for the whole period 1910-19 the average expenditure of this department in these two provinces had been 48 per cent on imported stores, 40 per cent on produce of India and 12 per cent through the Director General of Stores, India Office.

13. The figures for the war period indicate that there is but little difference in the practice obtaining in State-worked and company-worked lines; the tendency in the latter to purchase a somewhat larger percentage of imported stores locally is due no doubt to their freedom from the restrictions of the Stores Rules. We think that the proposals we are making in respect of purchase of stores by State-worked railways will prove generally suitable to company-worked railways. The tables show that the total expenditure on stores by company-worked railways amounts to about double that of State-worked railways and is nearly half the total for the whole of India; this lends weight to our suggestion, made elsewhere, that, on the completion of existing contracts, the company-worked railways should be amenable to the Stores Rules, as are the State-worked railways.

Comparison  
of practices of  
State and  
company-  
worked  
railways.

14. In addition to the stores purchases to which these observations refer, we have also considered the analogous question of the purchase of public requirements of a special kind, namely, ships, which cannot be classed as 'stores', but the method of procuring which is the subject of special rules laid down by Government: Chapter X of the report is devoted to the discussion of this matter.

Ships.

15. It has already been laid down by Government that, in order to give all possible encouragement to Indian industries while at the same time to ensure economy and efficiency in obtaining supplies for the public services, the establishment of an efficient organisation in India for the purchase and inspection of stores is essential; the main purpose for which this Committee was appointed is to work out the detailed organisation which will be required for this purpose. To do this it is necessary to consider the present methods adopted in supplying government requirements and to what extent alterations are desirable. We have also interpreted our terms of reference, which are reproduced in the preceding chapter, as requiring us to consider the policy governing, and methods adopted for, the purchase of all classes of stores, imported as well as those of indigenous origin and local manufacture. Two of our members have taken a more restricted view of the scope of our enquiry, and have recorded their views in the memorandum accompanying this report. In view of this difference of opinion, we consider it desirable to state somewhat fully the reasons for the view taken by the majority. The wording of the terms of reference is clear and unmistakable; we are to enquire and report:

Scope of  
enquiry.

"What measures are required to enable the departments of the Government of India and of Local Governments to obtain their requirements as far as possible in India."

\* \* \*

and again:

"What modifications of the Stores Rules will the scheme, recommended by the Committee, necessitate."

Under the rules referred to in the latter reference the requirements of government departments, alluded to in the former, are to a considerable extent met by the authorised purchase in India of imported stores, and still more largely by the purchase of stores of a similar nature in the United Kingdom.

**Imported  
stores.**

16. An analysis of the returns of expenditure, specially prepared for our use at the instance of the Indian Munitions Board, shows that the proportion of imported stores purchased in India amounted, for the pre-war and war periods respectively, to 9 per cent. and 18 per cent. for the whole of India, and to 32 per cent. and 37 per cent. for Local Governments; while the ratio of the purchases of stores in the United Kingdom to the total stores purchases for government purposes was no less than 51 per cent. and 35 per cent. respectively. Imported stores thus form so large a part, under normal conditions decidedly the preponderating part, of the requirements of Government, that the total exclusion of their consideration, or the treatment of this as a subsidiary matter, as contemplated by our colleagues, would, in our opinion, have been a course which could not be justified; it is clear to us that, had there been any intention of restricting our enquiry in the manner suggested, Government would not have failed to make this clear. Nor could we afford to neglect the evidence offered to us in regard to the bearing of this matter on the questions of economy and efficiency. The majority of the witnesses who have appeared before us have been in favour, in varying degrees, of the removal of the restrictions now existing in respect of the purchase of imported stores, although they have made it clear that they have no intention of suggesting that Government should be expected to purchase in India inferior imported articles at an exorbitant price merely for the purpose of enriching merchants; the reasons advanced by them in support of their views have reference to the advantages of positive economy, convenience in more rapid supplies, the availability of expert advice and assistance, as well as the prospective encouragement and increase of local manufactures. We do not desire further to labour the point, nor do we consider it necessary throughout the report to controvert the observations arising out of the application of their own opinions, by our colleagues on the various details hereafter discussed.

**Stock depots.**

17. The question, whether the proposed Indian stores agency, or department, which it is one of our main duties to formulate, should maintain central stock depots for the general convenience of the departments which it will supply, was naturally one that came prominently to our notice at an early stage, since it was evident that our proposals as regards methods of supply and details of the organisation would depend to a considerable extent on the decision arrived at on this point. The idea is not a new one; it will be seen from the summary of the correspondence in Appendix B that a proposal to instal depots for imported stores at the principal ports for Railway Administrations was made by the Secretary of State in 1888, but was not acceptable to the Government of India on the grounds that "whatever system was adopted for State railways, guaranteed railways must be

allowed to make their own arrangements, and that as far as State railways were concerned each was served by a different port, hence each line would in effect have its own reserve depot, which it was the special object of the proposed system to avoid." Again, in 1917, the Secretary of State drew the attention of the Government of India to the question of forming depots of general stores in connection with the amalgamation of Public Works and Military Works indents, but did not press the matter. In noting on the proposal, the Director General of Military Works stated that "the system of maintaining special stocks of ordinary stores at the ports has been tried by the Military Works Services and found not to be a success". In the Public Works Department the question was examined in some detail; excluding machinery and special stores, for which it was obviously impossible to amalgamate indents or desirable to form depots, it was ascertained that in 1914 the total value of indents for ordinary materials (*i. e.*, cement, cast-iron pipes, steel sections, corrugated sheets, paints, oils and varnishes) sent to the India Office amounted to £122,000, of which £19,000 only represented the demands from non-maritime provinces. It was therefore considered that, since it was open to the maritime provinces to institute provincial depots if they so desired, no case had been made out for the maintenance of Imperial depots at the ports to serve the whole of India.

18. The proposal to introduce large stock depots at one or more suitable centres in the country is however one which merits further consideration. The evidence received on the subject varied considerably; some witnesses visualised the new stores department working on this system with a reservoir of stores capable of meeting almost any demand, and thus avoiding the tedious delays of waiting for supplies from England; the majority consider that any attempt in this direction would be cumbrous and costly. There is no question that such depots would frequently be a source of considerable convenience, but to be in any way efficient they would necessarily be very costly, and would involve the investment of a large capital sum, as well as considerable recurring expenditure on staff engaged both for handling the goods and for accounting purposes. The initial outlay in acquiring lands, erection of store houses and construction of railway sidings would be heavy. The cost of such an installation in a port would be prohibitive and it would be necessary to establish it at some convenient railway centre away from the coast, all imports being railed in bulk from the ports or manufacturing centres. Climatic considerations alone, owing to deterioration of material, would necessitate this course; we understand that two military arsenals have been removed from coast towns mainly on this account. There are already, scattered over the country, many government stock depots, notably those of railways, in which, though the stores themselves are for the most part constantly changing and being utilised, a very large capital is permanently locked up. The deciding factor as to whether central stock depots are desirable and would be justified must, we think, be whether their introduction would render possible such reduction and economy in existing stocks as would compare reasonably with the cost of the new depots.

Their disadvantages.

Amalgama-  
tion  
undestralle.

19. An examination of the existing position as regards stock depots, based mainly on evidence received from witnesses, gives the following results. Railways, which are necessarily dependent to a considerable extent on imported stores, maintain large and carefully organised depots, the capital locked up amounting to some five and seven crores of rupees respectively in State and company-worked systems. The Army, more particularly in the ordnance branch, are also considerable stock-holders for military reasons. Apart however from these we do not find in other departments that the stocks held are much more than those required as expense stores. In the Military Works, there are no central depots except those for military operations, and the practice of maintaining stocks of imported stores at the ports for the benefit of districts in the interior has been abandoned. In the Public Works Department, two provinces only, Madras and Burma, adopt the central store system. As regards railways, we are satisfied that, in any event, they would have to maintain very large stocks of their own, and we do not consider that there would be any more likelihood now of reduction in the stocks held by them than was anticipated in 1888. It would be impracticable for a central store to deal with departmental demands from individual railway officers, and to supply railway stores from central depots would mean additional handling of the goods. Similar arguments would hold for the Army: issues could only be made to arsenals, or factories, or divisional or similar stores, which would in their turn deal with indents from units or individuals. The only case in which central depots might be of use would be for provincial services, or as a common depot for use by Public Works, Forests, Police, Jails, Dispensaries, etc. Looking, however, to the very diverse requirements of the services which might be expected to benefit by a central depot, there is no doubt that the variety of stock would be immense, and that fluctuation of demands would be caused by many indeterminate factors; unless such a depot were in a position to meet practically all demands at once from stock it would fail in its principal function.

Stock depots  
not justified.

20. We have, therefore, arrived at the conclusion that the great expense central stock depots would necessarily involve would not be justified.

Periodical  
review of  
stocks.

21. In view, however, of the very large sums at present lying idle in stock depots, especially in those of railways, we consider it well to draw attention to the desirability of instituting searching periodical inspections of all such depots, to ensure a full enquiry into the details of the stocks held, how they compare with issues, and the periods the different classes of articles are held in stock before issue, with the view of ascertaining whether, and if so in what directions, stock balances can be reduced and really surplus stock got rid of. We are of opinion that the demands by individual officers for special commodities are, to some extent, responsible for the large quantities of surplus articles, and that the remedy for this will be found largely in enforced standardisation.

## CHAPTER III.

## STORES POLICY.

22. Government officials are not free agents in the matter of purchase of the stores they require for their work, but are bound by rules issued from time to time by the Government of India in accordance with the policy dictated by the Secretary of State. A history of the rules for the supply of articles for the public service will be found in Appendix B to this report; but it will be convenient to summarise it briefly in this chapter.

Government  
officials  
bound  
by rules.

23. In 1862 the Secretary of State gave instructions that all articles manufactured in England were to be obtained only through the Store Department of the India Office; in those days the policy of encouraging local industry was not apparently contemplated. These rules were relaxed in 1875 to the extent of permitting the local purchase of European stores when inconvenience would arise from delay in supply from England; in cases of urgency; and when the articles were perishable, or for occasional consumption only.

Rules of  
1862.

24. In 1876 the Secretary of State, anxious to bring about a complete change of policy, proposed that, with the exceptions of railway plant, special machinery, and military and ordnance stores, in respect to which the agency of the Store Department could hardly be avoided, everything should be bought either through agents in India or direct from firms in England; this he considered to be in the interests of economy, trade, and the exchange. He forwarded extracts from a report of a special Committee, which he had appointed to enquire into the functions and administration of the Store Department of the India Office, in which they recommended that, in substitution of the rule requiring purchase to be made through the India Office, it should be left to the Government of India and Local Governments to decide as to the mode in which, and persons by whom, supplies of any kind might be made; he requested the Government of India to issue the necessary instructions for carrying these recommendations into effect.

Change of  
policy in:  
1876.

25. The Government of India accordingly issued new rules in 1878 laying down the class of stores which should still be obtained from the India Office. All other stores were to be obtained, as far as practicable, independently of the India Office by local purchase, or direct from Europe from manufacturers, or through private agents. In accepting these rules as being in general accordance with the views expressed in Lord Salisbury's Despatch of 7th December 1876, the Secretary of State directed that the special attention of local Governments should be drawn to the importance of substituting local manufactures for European articles even at some temporary increased cost, and that, as regards provision of stores not produced in India, the practice of dealing with merchants or agents should be adopted.

Rules of  
1878.



Reversal of  
policy in  
1880.

26. In 1880 the Secretary of State forwarded reports by the Director General of Stores, India Office, and by the Inspecting Engineer for State Railways, both of whom were very averse to the purchase of European stores otherwise than through the India Office. Lord Kimberley, considering that the objects of the Home Government had been imperfectly appreciated, and that the language of the special Committee of 1876 was not so clear as it might have been, desired that orders might be issued that, when stores were of such a nature that they had to be purchased in England, there should be no departure from the system of indenting on the Store Department of the India Office. New rules were accordingly issued laying down that European articles were to be obtained through the Secretary of State except in cases of delay, or when local purchase was more economical. The utmost encouragement, however, was to be given to the supply of European articles by the local market consistent with true economy, and it was held that, wherever possible, articles of indigenous origin or of local manufacture should be substituted for European articles.

Encourage-  
ment of local  
industries in  
1883.

27. The policy of encouragement of local industries was asserted by Lord Ripon's Government in a Resolution, issued in 1883, in which it was declared that the utmost encouragement was to be given to every effort to substitute, for articles now obtained from Europe, articles of *bona fide* local manufacture, or of indigenous origin; that, when articles of European and Indian manufacture did not materially differ in price and quality, Government would always be disposed to give preference to the latter; and that the Governor General in Council desired to remind all officers of Government that there was no reason why articles manufactured in India should not be obtained locally, even though the raw material necessary to their manufacture might have been originally imported from Europe.

Director  
General of  
Stores to be  
responsible  
to the  
Government  
of India.

28. In 1887 the Government of India, on the report of the Finance Sub-Committee on the value of stores purchased locally and the loss of public money entailed thereby, reported to the Secretary of State that the volume of these purchases was necessitated by delay in supply on the part of the Store Department of the India Office, and suggested that the head of that department should be considered as the agent of the Government of India. The Secretary of State replied that this was not compatible with his responsibility to Parliament for the expenditure of the revenues of India, but suggested the constitution of depots for imported stores at the principal ports, and the appointment of an officer to control purchases, as had been proposed by the Finance Sub-Committee. The Government of India, after full consideration, did not think the appointment of a Director of Stores feasible, nor did they think the establishment of depots at the ports necessary; the Secretary of State in 1890 agreed to abandon the proposals.

Appointment  
of inspectors  
negatived.

29. In 1890 a memorial was presented to the Government of India, by 34 firms engaged in iron and engineering industries, appealing against a decision by the Secretary of State that the preference to be accorded to local manufactures was not intended to apply to

articles of iron and steel manufactured from material imported in a raw or semi-raw state. The Secretary of State had based his objections on the inferior quality of material, the absence of testing appliances and the want of free competition. The Government of India proposed to remedy this by the appointment of inspectors, but the Secretary of State was unable to agree. Eventually a Resolution was issued in 1891 permitting, as a temporary measure, the local purchase of articles of iron and steel manufactured from imported material, to be limited to bridges and roofs of small span for the Public Works Department, and not to be applied to the requirements of State railways under construction.

30. The iron and engineering industries were, however, still dissatisfied, and, as a result of representations made to the Government of India and the Secretary of State, a Resolution was issued in 1898 extending the number of steel and iron articles manufactured in India which might be purchased locally, and dispensing with the condition limiting such purchase to articles the certain want of which could not be foreseen.

Resolution  
of 1898

31. In 1903 the Government of India again addressed the Secretary of State with regard to the delays incidental to the supply of stores by the Store Department of the India Office, and pointed out that, if it was not possible to reduce the time taken in complying with indents, it would be necessary to exercise more freely the powers of local purchase, and to increase the limit of powers of officers of the Public Works Department to purchase English stores. The Secretary of State in reply stated that delays, due among other reasons to manufacturing difficulties, were inevitable, and approved of the proposal to extend the powers of Public Works Department officers to purchase English stores locally, and thus diminish the number of indents sent Home for stores of small value.

Powers of  
local  
purchase  
extended.

32. Accordingly, rules for the guidance of officers of the Public Works and Railway Departments were issued as an appendix to the Public Works Department Code in 1904, and these rules formed the basis of similar instructions issued to military officers in Army Regulations (India), Volume III. The rules were permissive in form and, so far from including any declaration of the policy of Government to give preference to local manufactures, they laid stress on the advantages offered by the method of supply through the Store Department of the India Office. The prohibition against the purchase in India of articles of iron and steel manufacture for State railways under construction, and for first equipment of large engineering projects, was removed.

Rules of  
1904.

33. In 1905 the first conference of the Indian and Ceylon Chambers of Commerce passed an unanimous resolution to the effect that the policy of encouragement, announced in 1863, was materially retarded by the rules laid down for the guidance of officers; this was followed a few months later by a memorial to the same effect from the Engineering and Iron Trades Association (now the Indian Engineering Association). This led the Government of India to appoint the Stores Committee of 1906 to investigate the working of the Stores Rules. The Committee recommended that

Stores  
Committee  
1906.

preference should be given to articles manufactured in India from materials produced in the country; that articles manufactured in India from imported material should, by preference, be bought in the country unless a similar article could be obtained at less price from the India Office; and that articles not manufactured in India should be obtained by indent on the Store Department of the India Office when necessity for provision could be readily foreseen, and when purchase in India was not considered advisable.

Store Rules  
of 1909 and  
1913.

34. The proposed rules met with considerable criticism at the hands of the Director General of Stores and the Consulting Engineer to the India Office; the Secretary of State, acting on their advice, returned the rules revised in the form he was prepared to sanction. The main points of difference between the rules proposed by the Government of India and those sanctioned by the Secretary of State are :—

- (i) Absence in the preamble of any declaration of policy of preference to articles of indigenous origin, or local manufacture.
- (ii) The stipulation that articles of European manufacture must always be in India at the time of order, whatever the reason for purchase.
- (iii) Omission of the proviso that, in cases of emergency, articles of Indian origin should be purchased irrespective of price.
- (iv) Omission of establishment charges of Store Department of the India Office when effecting comparison of price.
- (v) Injunction that articles not manufactured in India must be obtained by indent on the Store Department of the India Office except when the article is in India at the time of order, and the cost does not exceed Rs. 3,000, unless the urgency clause can be invoked.

These rules were issued in 1909, and were re-issued in 1913 with a few minor alterations. They have remained in force since that date although temporary relaxations have been introduced to suit war conditions.

Purchase of  
plant and  
machinery.

35. In 1913 proposals were put forward by the Government of India that certain classes of imported stores should be purchased in India from established branches of British manufacturing firms, and opportunity was taken to discuss this matter at Delhi in 1914 with the Assistant Under Secretary of State for India; the proposal was agreed to, and Lord Crewe accepted the suggestions as contained in the memorandum of the meeting which had been drawn up by Sir Lionel Abrahams.

Proposals  
postponed  
for further  
consider-  
ation.

36. In 1917 the Government of India submitted to the Secretary of State a draft rule embodying the proposals, accompanied by a list of the plant and machinery it was proposed to buy in India, and the names of the firms who were recommended as fulfilling the conditions laid down. Mr. Montagu replied that he

and submitted the proposals to the criticisms of the officers of the Store Department and of his Consulting Engineers, and that they were unanimous in considering the proposed change open to very serious objection. He could not see his way to disregard their conclusions entirely, although he realised that many of their objections were those which had influenced his predecessors, but to which the Government of India had consistently taken objection. He was disposed, however, to approve the proposals subject to certain conditions; as it was unlikely that there would be any scope for the operations of the new rule for some years owing to war conditions, he asked the Government of India to give the matter their further consideration.

37. A study of the correspondence between the Government of India and the Secretary of State brings two points prominently to notice. The first is that since 1880 the Government of India have consistently, but not always with success, pressed for relaxation of the rules laid down from time to time by the Secretary of State, both in respect of local purchase of imported stores and of the encouragement of local industries. The second point is the influence of the Store Department and the Consulting Engineers to the India Office. The advice of permanent officials is naturally of great value, since they are the guardians of tradition and of the accumulated experience of the departments over which they preside. They, however, lack knowledge of Indian conditions and the changes and developments which occur from time to time in the matter of supply of articles for the public service in India: we find this influence has had a marked effect on the decisions of the Secretary of State more than once during the last forty years. The first occasion was when the policy, of purchasing and paying for all articles in India as far as possible, initiated by Lord Salisbury in 1874, was superseded by Lord Kimberley in 1880, in favour of that laid down nearly twenty years previously. We are not prepared to criticise the wisdom of this decision, but we notice that as long ago as 1875 the India Office Committee, whose recommendations met with Lord Salisbury's approval, remarked that the conditions under which the existing system arose were to a considerable extent obsolete. Again in 1889, Lord Cross viewed unfavourably the manufacture in India of iron and steel articles from imported material, with the result that the Government of India declared that their Resolution of 1883 in favour of local industries did not apply to the articles in question, and that objections to local purchase applied to these articles in the highest degree. In 1908 Lord Morley was unable to accept the draft rules proposed by the Government of India on the recommendation of the Stores Committee; similarly in 1913 the proposals for local purchase of plant and machinery, which had been discussed with Sir Lionel Abrahams, and accepted in principle by Lord Crewe, were returned by the Secretary of State for further consideration. In all these cases the correspondence shows the advice of the India Store Department to have been the dominating factor, and we cannot but observe that the attitude of that department has been, in the main, one of opposition to any measure which would lead to either purchase or

Deductions.

manufacture in India, and thus result in the gradual transfer of the supply of stores from the British to the Indian field.

Altered  
conditions.

38. With the establishment of an expert agency in India for the purchase and inspection of stores, the position will be fundamentally altered, and we consider that full powers can advantageously be delegated to the Government of India in all matters relating to the supply of their requirements, except in so far as they affect matters of Imperial Policy. We realise that, in the absence of a stores organization in India, it was inevitable that the Secretary of State should have leant on his technical advisers and it was but natural that they, owing perhaps to ignorance of Indian conditions, progress, and capabilities, should favour supply from England rather than India. We consider that, in the interests of India, the professional advisers should now be in India, and not in Whitehall, and we have accordingly drawn up our recommendations on paragraph (b) of our terms of reference in such a way as to secure to the Government of India freedom from control over their purchases. We advise that the Secretary of State should be asked to abstain by convention from interference in the supply of stores, and to delegate to the Governor-General in Council his responsibilities in the matter.

Policy  
recom-  
mended.

39. We have, after full consideration of the question in all its bearings, formed the opinion that present conditions require the fullest freedom to be granted to India in the matter of supply of articles for her public services. We admit that there will not be, in the first instance, that unrestricted competition which is rightly claimed for the existing system of purchase in the United Kingdom, but we contend that refusal to give the system a trial can only be due to failure to appreciate the trend of events. We cannot avoid comparison between the undeveloped state of the industries of India and those of other Eastern countries, and we look forward to an era of industrial development which will provide this competition. We therefore recommend the acceptance by the Government of India, as a definite policy, of the principle that all articles required for the public service shall be obtained in India whenever they are procurable in the local market of suitable quality and reasonable price, as well as that preference shall be given in all cases to indigenous articles or to those of local manufacture, except where it is manifestly disadvantageous to do so. These recommendations, and the considerations specially affecting them, are more fully expanded in Chapters VII and VIII of this report with reference to indigenous and imported stores respectively.

Extended  
purchase of  
imported  
stores unob-  
jectionable.

40. We attach no importance to the arguments that have been advanced against the extended purchase in the country of imported stores. It is contended that, because middlemen must make a living, all imported stores purchased through them in India must be dearer than if they had been obtained through the Director General of Stores, India Office; but the evidence given before us is far from bearing out any such contention. If this were the case, the result, under the Stores Rules

as recommended by us, will be that no imported stores will be purchased through them, the proviso as to price being definite. There is no doubt that commercial firms in India make large purchases of imported stores in the country, and we doubt if this would be done at the expense of economy. The contention that the Director General of Stores at the India Office can obtain cheaper freight than that obtained by private firms may be true as far as taking advantage of freight on government-owned ships is concerned, but no proof or evidence has been furnished to show that, when shipment has to be made by ordinary vessels, special freight terms are granted for the carriage of government stores. The question of trade discounts is one on which we have been unable to obtain conclusive evidence, but it is beyond dispute that discounts are given to the trade in respect of certain stores which does enable them to supply them in this country at as cheap rates as Government can purchase in England. There is the additional advantage that, in the case of perishable or breakable articles, merchants undertake delivery of stores in this country in good condition thus obviating possible loss or damage in transit. It is not necessary for us again to give detailed arguments in support since the question of relative cost was examined at length by the Stores Committee of 1906, and the Government of India, in forwarding the report to the Secretary of State (Despatch No. 33 of 1907), stated that "we cannot therefore avoid the conclusion, at which the Committee have arrived, that the advantage of economy whether actual or final, which is so often claimed for the present procedure, cannot in point of fact be held to be indubitably proved". This being so, the advantage of prompt supply by utilizing middlemen of good repute should undoubtedly be secured; moreover the possibility of buying in a favourable market, a practice of commercial life, will fall to the head of a well equipped organization unfettered in his choice of markets.

41. Another argument against the purchase of imported stores in this country, on which stress has been laid, is the difficulty attending their inspection. We see no force in this: stores require inspection either during manufacture, or as finished articles, and sometimes in both stages. We have stipulated that inspection during manufacture shall be arranged for by the London Branch of the Indian Stores Department. Efficient inspection of the finished article depends solely on the honesty and ability of the inspector, conditions which are unaffected whether the article be indigenous or imported. A firm that resorts to dishonest methods for the acceptance of its stores will do so equally whether it manufactures or imports its goods; any difficulty anticipated on this score therefore applies equally to the manufacturer as to the importer. It must be remembered that the inspector, in a properly organized department, is not concerned with the question whether stores are urgently required or not; quality is the sole criterion to guide him in acceptance or rejection. It was a grave defect in the system of certain departments prior to the war, a defect that still exists in some, that purchase and inspection were centred in one authority. In such circumstances temptation may prevail with an inspector, apart from any dishonest motive, to accept stores

No risk involved.

not fully up to standard in order to meet pressing demands; but under the organization we recommend this defect will not exist, and we therefore attach no importance to the argument that inspection of imported stores presents difficulties. That delay will occur if imported stores are rejected is obvious; this objection applies also to stores manufactured in the country, but since we contemplate dealing only with approved and reputable firms rejections should be exceptional and delays few; while evidence, on which all witnesses were practically unanimous, is that provision of imported stores through the Director General of Stores, India Office, is usually attended with delay.

Store  
Department  
in London to  
become a  
Branch of  
the Depart-  
ment in  
India.

42. The second general conclusion to which we have come is that the work that will remain to be done in England will, in due course, be dealt with as efficiently and more conveniently by a London Branch of the Indian Stores Department, directly responsible to a Director General of Stores in India, than by an independent department acting under the orders of a High Commissioner. It is important to bear in mind that the channel of responsibility of the Home purchasing branch to the Government of India is determined by a new factor, i.e., the presence in India of a specially constituted department, staffed with expert inspectors, responsible for the supply of stores to all departments of the Government of India, and to such local Governments as care to avail themselves of its services. This idea is not a novel one, a somewhat similar proposal having been made by the Government of India in 1887. An arrangement on these lines appears to have been present in the mind of the Government of India when framing our terms of reference; we are required by them to report "what should be the relationship of the agencies we propose with the Stores Department of the India Office or such other purchasing organisation in England as may hereafter take the place of that Department." This undoubtedly adumbrates the replacement of the existing Store Department of the India Office by a "purchasing organization," and clearly no advantage would be gained by substituting another independent department for one which is admitted to be efficient. We are supported in our conclusions by the opinions of a number of witnesses well qualified to speak. It has, we admit, been urged that it would be a mistake to discard the advantages of retaining the existing India Office Store Department and of placing it under the control of a High Commissioner. It is claimed that the Department has reached its present high level of efficiency as the result of over sixty years' experience; that the staff are well versed in business; and that, in technical matters, the professional knowledge of its officers is supplemented by that of Consulting Engineers, Naval Architects and other specialists of repute. We admit the correctness and force of these arguments; it would indeed be strange if this were not so, and we would be the last to suggest that the experience of a department, of whose efficiency there can be no question, should be thrown away.

Functions of  
Store  
Department,  
India Office.

43. We may at this point explain that, as shewn in Table VIII, Appendix D, only about one-third of the total volume of stores supplied through the India Office

is handled departmentally by the officers of the India Store Department in respect of both purchase and inspection. Various stores, mainly armaments, are supplied by the War Office and other government departments; and indents for such, we are advised, might without disadvantage go direct to such departments and not through the Director General of Stores. The remaining stores, amounting to more than about half the total, are purchased on the advice of Consulting Engineers, who prepare specifications, advise as to the acceptance of contracts and carry out inspection, leaving to the officials of the India Store Department the preparation, acceptance and watching of contracts and the shipment of stores. The total volume of business for which the India Store Department at present takes credit might apparently therefore be considerably reduced at once by a change of procedure without any loss of efficiency.

44. We have explained in paragraph 40 why we anticipate the ability to purchase in India at once certain classes of stores at present imported through the agency of the Store Department of the India Office. The inauguration of an inspection branch under the Indian Stores Department will lead immediately to the reduction in other classes of stores similarly imported, *e.g.*, paints, which have been manufactured in India for many years. From a scrutiny of pre-war indents, we find that, in the case of annual demands from arsenals, practically no paints were procured in this country, while railways purchased considerable amounts; this we understand was solely due to the absence of expert inspection. It will therefore be the more common articles, which are purchased and inspected by the officers of the Store Department of the India Office, that will be procurable in increasing quantities in India, while the articles which it will still be necessary to procure from the United Kingdom will be those of which purchase is effected on the advice of, and which are actually inspected by, the Consulting Engineers. Consequently as the work of the Store Department of the India Office will steadily diminish from the commencement and its cadre be capable of reduction, we do not think that we are making an inappropriate move when we suggest that the present Store Department of the India Office shall eventually become a branch of the Stores Department in India. We predict no date by which this change will be effected; the circumstances forbid any certainty on this point. Assuming however that the response of the people of India to the whole-hearted encouragement by Government of their industries is equal to that of the people of Japan in similar circumstances, an assumption that need not be doubted, we see no reason why the change should not take place within five years; we however attach no importance to the period within which this change is effected. Given time for preparation, the new department should experience no difficulty in taking over and arranging effectively for the provision of stores already purchased in the country, and in exercising a scrutiny over the other demands. To maintain efficiency and economy, and to obviate all risk of inconvenience to indenting officers, the process of eliminating articles from the Home Supply list and

Subordina-  
tion of the  
Home to the  
Indian  
Stores  
Department.



adding them to the Local Supply list must at first be slow, while further data are being accumulated and suitable procedure arranged. When once this has been effected and industries develop, the process should accelerate in geometrical progression. We consider it essential that the principle of the subordination of the Home to the Indian Stores Department should at once be accepted, so that when the time is ripe the change can be carried out without further delay in examining the subject afresh.

Disadvantages of two separate Departments.

45. We are not satisfied with the suggestion that the successor to an India Store Department under a Secretary of State should be an independent body under the direct control of a High Commissioner. The existence of two departments, both responsible through separate channels to the Government of India for the supply of stores of English and Indian origin respectively, is unsound for administrative reasons, while two independent departments can hardly fail to be more expensive than one. It is inevitable that the department in England should strive to uphold its status even though the work is diminished, and not unnatural that it should receive support in this respect from the High Commissioner. In paragraph 43 we have explained how more accurate allocation of the work which the Store Department of the India Office actually does would apparently permit at once of a reduction in its status without any risk to efficiency. As the work of procuring stores in India increases, and that of procuring them from England decreases, it is desirable that the corresponding increases and demands of establishment should proceed *pari passu* and without any friction between the two branches; this is only possible when one authority controls both. The Director in England would of course be given wide powers in the conduct of business, and it would be a matter of primary importance to maintain the London Branch at its present high level of efficiency by continuance of the existing staff and procedure to the extent required for the work that remains. The Director would, however, be responsible and directly subordinate to the Director General in India, submitting to the latter any proposals he might have to make as to changes of policy. It would not, we think, be inconsistent with these proposals to recommend that the London Branch should be subject to the jurisdiction of the High Commissioner in all matters affecting the discipline of the staff and employes, and in questions, affecting English law and practice, which might arise in respect of contracts, fines, compensation, etc., and in which it would be necessary to invoke the aid of an authority and prestige higher than that of a departmental head. We see no difficulty in this arrangement, nor do we consider that it savours of dual control; it is customary in military administration for branches of technical services, controlled by the departmental chief at headquarters responsible for their efficiency and working, to be subordinate to the local military authority in matters of discipline and interior economy.

## CHAPTER IV.

## EXISTING METHODS OF STORES PURCHASE.

46. In the following paragraphs an account is given of the system at present in force in the principal departments of Government for procuring their requirements both of locally produced and imported stores. We have gone into considerable detail in describing the procedure in the case of the 'State-worked' railways in view of the large percentage the purchases, by railway administrations generally, bear to those of the whole of India. During the war period 1914-19, when the railway grants were necessarily curtailed and when supplies from England were reduced to a minimum, the railway expenditure, including that of company-worked lines, amounted to about three-fifths of the total; with an expanding programme we may expect large increases in the amount spent annually on railway stores. We have also explained the Army procedure at some length, both because of the number of the different services concerned, and of the extent to which it is proposed that in future the Army should utilise the services of the Indian Stores Department.

Introductory.

## RAILWAYS.

47. Each railway is self-contained in the matter of its stores purchases, and maintains a properly equipped organisation, designated the 'Stores Department', to meet the requirements of all departments, for stores, plant, machinery, locomotives, rolling stock, etc., (excepting coal, timber and sleepers, which are arranged for by the departments, directly concerned). The Stores Department is managed by a Controller of Stores at headquarters, assisted by District and Assistant Controllers. The bulk of the stocks are kept at headquarters where all arrangements for obtaining supplies are made. For facility in distribution, outstation depots are maintained at important centres, with a number of smaller depots to serve the various Locomotive and Carriage and Wagon Shops. The important out-depots are in charge of a District Controller of Stores, and the smaller depots are placed under a senior subordinate designated 'Sub-Storekeeper'. Stores are divided into two main classes, *viz.*,

State-worked Railways.

(a) Stores usually purchased in the country.

(b) Imported stores obtained from England.

48. For stores falling under class (a), supplies are generally arranged for under annual contracts. The Stores Department prepares a forecast of the annual demands, based on the average annual consumption for the previous two or three years, in consultation, where necessary, with the consuming departments; for these stores public tenders are invited. Where standard samples are maintained tenders are required to quote to those samples; in other cases samples are called for, and are received with the tenders. The tenders and samples are examined by a Committee composed of the Agent and the heads of departments, or their deputies, and the most favourable quotations

[Country stores.]

are accepted. After acceptance of tenders by the Committee, the Controller of Stores has power to order supplies, as necessary, up to the limit of the quantities shown in the contracts without further sanction from higher authority. In the case of country stores, other than those obtained under annual contracts, the powers of the Controller to purchase are limited to Rs. 500 (Rs. 1,000 in selected cases) for each purchase. Tenders are usually issued to firms selected by the Controller, and supplies are inspected by comparison with approved samples. Controllers of Stores have at present no means of obtaining intelligence, in a systematic way, regarding indigenous manufactures and products in the country. Their only source of information in this respect is their own experience; the natural tendency, therefore, is to include in the Home Indents, all articles of which there is the least doubt of procuring in India at prices comparing favourably with those of imported stores. In fact, any true comparison of prices is out of the question.

[Imported stores.]

49. For stores under class (b), heads of departments prepare annual forecasts of the requirements which specially concern their departments, and furnish them to the Controller of Stores. The demands are framed on the previous three years' consumption, and on the basis that a stock of 18 months' requirements has to be maintained. The Controller of Stores prices the indents on the data of the latest rates paid by the India Office for similar articles; puts them in type, and furnishes copies to the Agent for approval and transmission to the Director General of Stores, India Office. Indents for different groups of stores are transmitted at regular intervals, to admit of their being dealt with conveniently in England; emergent indents are submitted at any time as occasion arises. While indents for special stores, *i.e.*, plant, machinery, etc., peculiar to departments, are prepared by the department concerned, the indent for such miscellaneous stores as are common to all departments is prepared by the Controller of Stores; all such indents are transmitted to the Director General of Stores, India Office, through the Agent. When stores indented for from England do not arrive in time, and stocks have run out, local purchases are made by the Controller on his own authority, up to a limit of Rs. 200 for each item. For purchases in excess of this amount the sanction of the Agent or of the Railway Board is necessary in accordance with the Stores Rules. Casual and emergent demands for imported stores are dealt with by the Controller of Stores by inviting tenders from the approved firms on his list.

[Inspection.]

50. The annual contracts for indigenous stores generally stipulate for delivery in railway godowns, where the inspection is performed by an officer of the Stores Department by comparison with the accepted or standard samples, consuming departments being consulted in the case of stores requiring technical inspection. When inspection during manufacture is necessary, as in the case of rolling stock constructed in India, an official, generally of the foreman class, is deputed to the works of the contracting firms to supervise operations, or the services of the Superintendent of Local Manufactures at Calcutta are employed. The Government Test House at

Alipore is also used for tests of oils, paints, etc. Occasionally, in emergent cases, supplies are ordered from reliable firms, without previous inspection of samples, when the articles are of known brands or pattern, with not unsatisfactory results.

51. The value of the stores held in stock by the three State Railway Administrations on the 31st March 1919 was :—

[Value of stocks.]

Railway.			Value of stores in stock.
			Rs.
North Western	...	...	2,72,65,000
Eastern Bengal	...	...	1,70,51,000
Oudh and Rohilkhand	...	...	53,48,000
Total	...	...	4,96,67,000

52. Under this head are considered the large railway systems, for the most part State property, which are worked by companies domiciled in the United Kingdom and under contract with the Secretary of State for India. The stores purchase operations of these companies are regarded as falling within the sphere of management for which each company is entirely responsible, and are not regulated by the Stores Rules of the Government of India or by any other special orders. The procedure adopted is, however, generally similar to that of the State-worked railways, except that the railway companies do not utilise the Store Department of the India Office, purchases in the United Kingdom being made by the Boards of Directors in London, assisted by Consulting Engineers of their own choosing. The extent to which these railway administrations make purchases in India varies considerably, but it appears from the evidence tendered to us that, as a whole, they fail to encourage or take advantage of indigenous industries, as far as desirable. An inspection of some of their Home indents suggests that generally speaking much the same classes of stores are bought in the United Kingdom by the company as by the State-worked railway administrations, and the same failure to make the fullest use of Indian manufactured goods is apparent, due to the same reason, namely, want of information.

Company-worked railways.

53. The values of the stores held in stock by the principal railway companies at the end of March 1919 is shown below :—

[Value of stocks.]

Railway.			Value of stores in stock.
			Rs.
Assam-Bengal	...	...	17,74,000
Bengal-Nagpur	...	...	79,40,000
Burma	...	...	55,16,000
Bombay, Baroda and Central India	...	...	1,42,88,000
East Indian	...	...	1,16,14,000
Great Indian Peninsula	...	...	1,94,36,000
Madras and Southern Mahratta	...	...	70,16,000
South Indian	...	...	59,36,000
Other Railways	...	...	30,15,000
Total	...	...	7,65,30,000

Aggregate  
value of  
stocks held  
by Indian  
railways.

54. The total amount locked up in railway stores balances is thus :—

		Rs.
State-worked railways	...	1,96,67,000
Company-worked railways	...	7,65,50,000
		<hr/>
Grand Total	...	12,61,97,000
		<hr/>

### THE ARMY.

Departmental  
organisation.

55. In all branches of the Army the procedure in force for replenishment of stores is alike, in that a demand is prepared at specified periods, at least once a year, for stores of all descriptions irrespective of source of supply. In the case of ammunition, technical instruments, lethal weapons, their spare parts, and certain other stores, there are special rules for forecasting the requirements of the coming year, but for expendable or ordinary stores the demand is based on the average of the past three years' consumption. The departmental services are organised for administration in Commands, Divisions and Brigades in conformity with the general organisation of the Army in India. All branches of the Army have establishments in different parts of India, where stores are stocked for their own use or for issue to troops dependent on them. The areas of the establishments for executive duties are not in all cases co-terminous with those of Divisions and Brigades, nor with those of each other, *e.g.*, in the Military Works Services there are thirty-five Districts and Independent Brigades, each of which forms the charge of an Assistant Commanding Royal Engineer, while for the Indian Ordnance Department there are only seven arsenals and four depots to undertake the supply of all ordnance equipment. The manner in which the annual demands of the several establishments is dealt with after preparation differs somewhat, depending on the organisation of the branch which has been found by experience to be most suitable. Thus in certain cases the demands of all executive establishments are checked and combined at Army Headquarters, in others the demands are dealt with divisionally, or partly divisionally and partly at Army Headquarters.

Ordnance  
procedure.

56. The procedure described below is typical of those departments whose requirements are regularly recurring. Provision is made under three heads :—

- (a) articles obtained from England ;
- (b) articles manufactured in Ordnance Factories in India ;
- (c) articles purchased in India.

Demands are prepared in printed forms according to the source of supply, items being grouped sectionally. These forms are scrutinised periodically and items transferred from one heading to another as necessary ; such transfer usually is from (a) and (b) to (c) as industries in India develop.

57. The demand for Home stores is taken in hand on the 1st April of the year preceding that for which the demand is being prepared. Thus the demand for the year 1921-22 would be commenced on the 1st April 1920. The demand has to be taken in hand so early, partly because of the time required for preparation, and partly because the cost must be known in advance for budget purposes. Ordnance equipment is classified in official 'vocabularies' by sections, and is stored in arsenals by groups of sections; the number of items in a group varies from one to three thousand. The Store-holder responsible for the custody and care of the stores prepares the demand. He is expected to have an intimate knowledge of his stores, the purposes for which they are issued, and the rules authorising their issue. His work is checked by a divisional officer who is responsible for the supervision of one or more groups; and the ordnance officer in charge of the arsenal also scrutinises the demand, checking important items and any which for special reasons require his attention. Column one of the annual demand form shows the actual issues of the past three years. If these figures vary greatly the reason is enquired into through the detailed issues recorded in the ledgers, and due allowance is made for any special cause. As the demands arrive at the office of the Director of Equipment and Ordnance Stores the items are abstracted into a form showing the amounts demanded by each establishment. This summary is then scrutinised by expert clerks who are acquainted with prospective changes of equipment and future programmes, and who are thus able to check and bring up-to-date the demands of the establishments. The annual demands as received also show the stocks in hand and under order on the 1st April, and where any demand has been made, which is not based on the figures of the past three years' issues, an explanation is given. After allowing for surpluses, which may have accumulated at any establishments owing to abnormal circumstances, the total requirements for the whole department are arrived at, and a printed and bound demand is prepared, priced, and submitted to the India Office. In the case of requirements for the ordnance factories, the work of preparation of the annual demand continues throughout the year, and section by section is printed as ready and sent to England.

[Home  
stores.]

58. Demands under (b) and (c) are similarly prepared. Those on ordnance factories, are notified to the Director General of Ordnance, who places work orders on the factories concerned. The requirements of indigenous stores are divided into three categories, classed as 'local purchase,' 'annual contract,' and 'group contract.' In the first category the requirements are so small that it is not considered worth while to look beyond the station of the demanding officer, who is authorised to obtain items so classified in his own station; the rates to be paid, and the shop or firm from which purchased, are matters for the executive officer concerned. For articles in the second category ('annual contract'), the executive officer has to invite public tenders, by advertisement in the local Gazette, and in the leading newspapers, both English and vernacular. The rates tendered are entered in a summary and submitted,

[Demands on  
ordnance  
factories and  
purchases in  
India.]

with the recommendations of the executive officer, to the Director of Equipment and Ordnance Stores for approval. The rates are compared with those previously paid in the same district and with prices being tendered for similar articles in other areas; the lowest quotations from reliable contractors are approved unless, as occasionally happens, it is cheaper to get the items from elsewhere, taking into consideration the additional cost of freight from a greater distance. For articles classified as 'group contract' the Director of Equipment and Ordnance Stores himself invites tenders, advertising in a similar way. Such articles would be coal, soap, oils, flannelette, tents, etc., i.e., articles required in great numbers, or not everywhere procurable, or more suitably provided by specially equipped firms. In some cases the contract would be for a term of years extending to five, and the contractor might be required to maintain a reserve of the finished article or of raw materials, such being open to inspection by appointed officers without notice.

[Inspection.]

59. The stores under contract are delivered as a rule at the depot or arsenal which demanded them. Occasionally, for some special reason, stores for one establishment are received at another, this is not unusual in the case of 'group contract' articles. The stores, accompanied by an invoice quoting the authority for their supply, are, on receipt at the arsenal or depot, inspected and compared with the sealed sample or specification. Formerly, this inspection was carried out by the ordnance officer in charge, but more recently inspectors have been appointed to carry out this duty. This inspection is a detailed one, every item under supply being handled and scrutinised by the subordinates of the inspection branch and sorted out into three lots, fit for receipt, doubtful, and unfit for receipt; the inspecting officer then examines, and passes or rejects them. After this the invoice is completed according to his decision, and the accepted stores are brought to account, the ledger and folio of their posting being entered in the invoice. This invoice, together with the rejected stores, is returned to the contractor, the reason for rejection of all items not passed being entered in the invoice. The contractor then completes the invoice as a bill, and after obtaining the countersignature of the officer in charge presents it for payment to the local treasury office.

Royal Indian  
Marine.

60. Annual indents are based on the consumption of the preceding three years and their preparation occupies about six months. Articles of indigenous origin are demanded separately from those of Home Supply, which include certain requirements for the vessels of the Royal Navy. The standard of stores supplied to the Royal Navy is a very high one and stores must be up to the Admiralty specification. For indigenous stores tenders are invited every six months.

Military  
Works  
Services.

61. In the Military Works Services, whose main duty is in connection with new and varying works, provision of stores is made as required for each measure and on dates convenient for the purpose. In such cases the indents are not co-ordinated at Army Headquarters, but are submitted divisionally direct to the Director General

of Stores, India Office. In the case of a large project involving the erection of a number of similar buildings in various stations, it is some times found convenient to send one consolidated indent for English stores from the office of the Director General of Military Works. Local purchases are made, from time to time as may be necessary, by Assistant Commanding Royal Engineers who arrange for their own inspection, but it may be noted that Assistant Commanding Royal Engineers are located in the presidency towns and at Karachi and these officers are available for, and frequently perform the duty of, both purchase and inspection on behalf of up-country districts. In respect of machinery, a fully technically qualified officer is posted to the staff of each Chief Engineer of a command, in addition to an expert in the Director General's Office. The Military Works Services may thus be defined, in respect of purchase of stores, as a department which, to a large degree, exercises the functions of a central purchasing agency, and which is capable, under its own Director General, of extending those functions to a marked degree.

62. In the Supply and Transport Corps the Deputy Director of Stocks receives estimates of requirements from Assistant Directors, Supply and Transport, of Divisions, and after co-ordinating these with the existing stocks, sanctioned reserves, and current forward arrangements, makes demands on the Controller of Contracts. After extracting those items which can be arranged for at suitable prices in India the Controller frames the demand and obtains the approval of the Quartermaster General and the Finance Department to his indent, which is then transmitted to the Director General of Stores, India Office.

Supply and  
Transport  
Corps.

63. For mechanical transport stores the Central Depot at Chaklala makes provision for all technical stores, other than vehicles which are dealt with by the Mechanical Transport Directorate at Army Headquarters. Demands for these stores are not compiled annually but are formulated whenever necessary to replenish stocks, on the basis of the average rate of demand for six months, subject to the latitude permitted by a maximum and minimum stock formula.

Mechanical  
Transport  
stores

64. The stores for the Royal Air Force are divided into two classes (i) technical (ii) other stores, *i.e.*, anything not part of an aeroplane or its engine. The former are obtained by indent on the Air Ministry through the Director General of Stores, India Office. The latter are obtained entirely through the Quartermaster General in India. Requirements of indigenous stores are small, timber being the chief item.

Royal Air  
Forces

65. Medical stores required by government institutions, both civil and military, are purchased and distributed by the Medical Store Depots, Calcutta, Lahore Cantonment, Madras, Bombay and Rangoon. Stores required by the Medical Stores Department are obtained from three sources:—

Medical  
Stores.

- (i) England.
- (ii) Civil Departments in India.
- (iii) Suppliers in India.



Many of the requirements of the Department are manufactured in, and obtained from, the laboratories of the Lahore Cantonment, Madras and Bombay depots from raw materials, either imported or indigenous.

[From  
England.]

66. Annual indents for stores to be imported from England are prepared by Medical Storekeepers and submitted to the office of the Director General, Indian Medical Service, on the 15th August of the year preceding that to which they relate. Requirements are calculated on the basis that each depot should hold a stock of non-perishable articles equivalent to the expenditure of the three previous years, and of perishable articles equivalent to half the expenditure of the same three years. On receipt from Medical Storekeepers, the indents are consolidated in the office of the Director General, Indian Medical Service, and despatched to the Director General of Stores, India Office, early in the financial year for direct supply to each Medical Store Depot. Supplementary indents on the India Office are also submitted from time to time as required. All indents are priced in the Director General's Office from contract rates received direct from the India Office. In arriving at the actual quantities required from England, surplus stocks available at depots are taken into consideration, and surpluses are transferred from one depot to another thus avoiding overstocking.

[From Civil  
Depart-  
ments.]

67. Such drugs as quinine, opium, morphia, confiscated cocaine, etc., are obtained from civil departments in India.

[From  
suppliers  
in India.]

68. Articles which can be satisfactorily obtained locally are, in most cases, obtained by annual contract. tenders being invited from agents, contractors, and tradesmen by means of advertisements, in newspapers, government gazettes, etc. When the tendered rates or samples are not considered favourable, requirements are purchased either out of contract in the local market, or through other Medical Store Depots where local prices are found to be more favourable. After tenders are opened they are entered by each Medical Storekeeper in a comparative statement which is despatched, with recommendations, to the Director General, Indian Medical Service, who, after considering the various quotations, sanctions the annual contracts. The comparative statement is then returned to the Medical Storekeeper concerned with the Director General's orders endorsed thereon. Purchase of local articles out of contract is also sanctioned by the Director General. The Government of India have recently granted contractual powers to Medical Storekeepers up to Rs. 1,000 per annum in the case of any one article.

#### PUBLIC WORKS DEPARTMENT.

69. The public works in each province are divided up for administrative purposes into circles in charge of Superintending Engineers; each circle consists of a number of executive charges called divisions under Executive Engineers who do not, as a rule, hold stock, although in certain provinces, *i.e.*, Madras and Burma, central stores are maintained for the province as a whole. In Madras a stock of about Rs. 12 lakh is

maintained; the Superintendent, Public Works Department Stores, consolidates all indents from divisions on the Store Department of the India Office and in addition submits an annual indent to recoup stocks of ordinary articles, such as paints, fittings, metals, etc., on the basis of the annual consumption of the last three years. In Rangoon the stock consists mostly of metals to the value of about Rs. 7 lakhs; the procedure for obtaining stores from England is similar to that prevailing in Madras. In other provinces indents on the Store Department of the India Office are submitted by Superintending Engineers. Petty stores are usually supplied under annual contracts, and other material as required by tender. If the recommendation of the Public Works Department Reorganisation Committee that contracts shall be entered into for complete works, contractors being encouraged to supply all the materials required for their construction, is carried into effect there will be little necessity to arrange for the supply of imported building materials in ordinary use.

#### TELEGRAPH DEPARTMENT.

70. The Superintendent of Telegraph Stores, Calcutta, purchases practically all indigenous stores required by the Telegraph Department in the local market; these amount to about Rs. 5 lakhs annually; purchases of coal, coke and pig iron, etc., required for the Telegraph Workshops are purchased by the Superintendent of the shops. The Superintendent of Stores also prepares and sends to the India Office the annual indent for construction and general stores. Indents for instruments and cables are prepared by the Chief Electrician, and those for consumable material for the shops are made out by the Superintendent, Telegraph Workshops. Indents are based on the average annual consumption of the last three years.

#### POST OFFICE.

71. Very few stores are obtained from the India Office, those procured in India are usually supplied on contracts made by the Post Masters General of the nine circles into which India is divided. The contract for postal bags is negotiated by the Director General, Posts and Telegraphs.

#### PRINTING, STATIONERY AND STAMPS.

72. About 80 per cent of the stores supplied are the produce of India. Twelve months stocks of imported stores are maintained. Articles, such as typewriters and duplicators, which are of American make are purchased in India. Annual indents representing a year's consumption are submitted in March to the Director General of Stores at the India Office, one year before the articles are actually required. Country made paper is purchased on contracts from Indian mills entered into by the Controller for periods of one or more years and is delivered into the Controller's store at Calcutta for small consumers, or direct to presses and others who are large consumers. Country made articles, other than paper, are purchased on annual contracts made on consideration of rates. All paper and other materials are tested and examined before being passed into the public service.

## HIS MAJESTY'S MINT.

73. The procedure in the mints is to obtain imported stores required regularly by annual indents on the Director General of Stores, India Office, and to purchase all other requirements, except coal and coke, through a general contractor at schedule rates. Stores of local manufacture used in large quantities are the subject of an advertised annual contract. Items but seldom required are tendered for on enquiry by several merchants and the best tender accepted. The wholesale merchant is dealt with wherever possible.

## OTHER CIVIL DEPARTMENTS.

74. Other Civil Departments, except Jails and Police whose purchases of textiles for uniforms form a large item in their expenditure, do not individually or collectively expend large sums on stores and the bulk of their purchases are made in India. Many departments undertake research and experimental work and are empowered to obtain scientific instruments and machinery direct from the makers; their indents on the Director General of Stores at the India Office are thus proportionately small.

Need for a  
purchasing  
organisation  
India.

75. It will be seen that there is no inter-departmental centralisation of purchase, but that, in general, stores of local production are bought by appropriate departmental officers, and imported stores (except when bought locally in small quantities under the special provisions of the Stores Rules) are procured by separate departmental indents on the Director General of Stores, India Office; these indents give the estimated cost of each item and this is taken as an indication of the extent to which funds have been earmarked to cover the cost of the stores. It is the practice of the Director General of Stores, when the expenditure is likely to differ materially from the amounts so estimated, to inform the indenting officer and to await his further instructions; substantial savings in the estimates of cost are also notified. The special considerations needing the attention of the Committee in respect of the purchase of indigenous and imported stores will be discussed more fully in Chapters VII and VIII following. It will, however, be evident at once that, as experience has confirmed, local officials in India must be greatly handicapped in obtaining their requirements; and in the absence of any central authority possessing an adequate knowledge of Indian resources, and of an organization competent to place orders and to see that they are properly met, are often practically forced into the English market.

## CHAPTER V.

## GOVERNMENT FACTORIES.

76. Although the work done in the various government workshops and factories throughout India obviously employs local labour and other local resources to a very large extent, the conditions attaching to such work are so special that the case of these institutions appear to us to require particular attention. They undertake in the aggregate a large amount of manufacturing and repair work of particular classes some of which at least might be distributed to commercial firms, and, in the absence of such a distribution, not only do they not afford encouragement to private enterprise in the country, but they positively discourage it by the maintenance of an organised opposition, which has the advantage of practical freedom from the need of showing a financial profit on its working. The result cannot but be disadvantageous to private enterprise; by failing to broaden the basis of supply of particular kinds of goods it has the effect of limiting unduly resources which may be of vital importance in time of war, when demands are suddenly increased to an extent out of all proportion to the capacity of the specialised factories, and outside supplies may be cut off. We have therefore devoted special consideration to the question of maintenance by Government of factories for special purposes, and have reached the conclusion that it would be advantageous on the whole for Government to adopt, in this matter, a more definite policy of reliance on private enterprise than is at present indicated. The existing government factories fall into three classes, the consideration of which involves different principles according as to whether the factories are maintained merely as a matter of convenience to do work which otherwise might be entrusted to private firms; are intended more particularly to serve as a stand-by in time of war (including ordnance factories which manufacture articles whose nature suggests that direct government control is essential); or are designed to serve as pioneer factories to introduce and establish some new industry. Before, however, considering the particular kinds of factory in question, attention may be drawn to one general aspect of the case on which stress has been laid by many witnesses; that is the question of relative economy.

General  
consider-  
ation.

77. It has frequently been urged upon our consideration that justification of the maintenance of particular government factories is to be found in the claim, that these enable the requirements of Government to be supplied more economically than if the work were given out to private firms. We regret, however, that we have not usually been able to obtain reliable accounts which would show beyond doubt whether the claim, that such economy is attained, can be established. It is obvious that the officers who maintained this view may easily have been misled as to the results secured; and we have little doubt that, if the truth could be ascertained, it would be manifest that government workshops could not successfully compete with private firms, after making all reasonable allowance for profit. To take a case in point,

Claim of  
economy not  
established.

the example of a railway locomotive shop may be considered. The professional capacity of the staff employed in such a shop, and the excellence of the work turned out may be above question, but it must be evident that similar staff employed by a commercial engineering firm, which is constantly checking the value of the work done in competition with others by the practical test of dividend earning capacity, has an ever-present incentive to put forth an effort towards efficiency and economy which is lacking in the case of a railway whose profits or losses (even if these ever come under so searching a scrutiny) can be but slightly affected by the workshop results. This is, we believe, the general result of experience all the world over, and it involves no reflection upon the individuals employed in the railway workshop to suggest that they must suffer some loss of efficiency by not being subjected to the influence of this incentive. But though it must always be an important factor, we do not think that the question of economy, even if it could be authoritatively determined, is the one on which the answer to the question, whether or not a government factory should be maintained, should solely depend. To say that, if the State can manufacture a particular class of the goods, which it requires, more cheaply than it could buy similar articles from a private manufacturer, then it should do so, would be definitely to recognise the principle of government trading, and while this might conceivably lead to some special classes of goods being obtained at a slightly lower cost, this consideration might well be outweighed by the indirect benefits to the community incidental to the existence of successful industrial enterprises. We think, therefore, that the question of maintaining government workshops should be determined by the more immediate considerations of their convenience, and, in certain cases, of their necessity as means of national insurance, or as pioneers of industry. Typical cases of factories to which these considerations apply, are :—

- (a) *Government factories which are maintained mainly on the ground of convenience.*

Railway Workshops,  
Telegraph Department Workshops,  
Mathematical Instrument Office Workshops,  
Public Works Department Workshops.

- (b) *Government factories which are maintained mainly as a measure of national insurance.*

Ordnance Factories,  
Army Clothing Factories,  
Royal Indian Marine Dockyards.

- (c) *Government factories which are maintained as pioneers of industry.*

Medical Store Depots (factories),  
Government Turpentine and other pioneer factories.

It will be convenient briefly to consider these individually.

78. In the early days of railways in India and before the expansion of the country's industries, it was necessary for railway administrations to make provision as far as possible for the manufacture and repair of as many of their requirements as was feasible. The position is altered by the development which has taken place in the iron and steel industries in India, and good facilities now exist for the manufacture in this country by private firms of many of the stores, appliances, and plant required; indeed signs are not wanting that, in the not far distant future, practically the whole of the equipment necessary for railways may be available from indigenous sources of supply. We may refer here to the opinion recorded in 1906 by Sir A. Rendal, late Consulting Engineer to the India Office, when commenting on the report of the Stores Committee of 1906:—

Railway  
Work-  
shops.

“ I have always been an advocate for the encouragement of the industries of India by the manufacture of railway material in India, not only as a duty to her labouring classes, but as a means of, in some measure, freeing her from the disastrous effect on her railway finance of the high prices which sometimes prevail in England. I have, therefore, with some, and I hope increasing effect, urged the construction of locomotives, rolling stock, permanent-way material and other railway plant, in the various railway workshops, and though I have not been so anxious to see railway work done in private Indian shops, yet I have advised the placing of a good deal of work with them.” (Secretary of State's Despatch No. 21-Financial-Stores, of 18th October 1907.)

Conditions however are different to those prevailing when the above note was written, and the expansion of private enterprise, and improvement of equipment and standard of output, due largely to the impetus given by the war, warrant our recommendation to place railway and other government contracts with private firms, with the confidence that our trust will not be misplaced. We recognise that ample facilities must be maintained by railway administrations for keeping their plant and rolling stock in efficient working order; but the railway workshops are equipped in some cases for a class of manufacture which we think falls outside their proper sphere and which we consider should not be encouraged. The combining in a railway system of what might be termed its legitimate work, *i.e.*, the transportation of goods and passengers and upkeep of the equipment necessary for their service, with the work of manufacturing material and plant required adds to the possibilities of danger when labour troubles arise. We consider that Government should encourage the development of industries in India by placing with industrial firms as far as possible the manufacture of its requirements for all State-worked railways, and that railway workshops should be maintained mainly for purposes of repair and experimental work.

79. These are kept up principally for the purpose of assembling and carrying out repairs to instruments and plant used by the department. Much of the work is of a technical nature and requires the attention of experts trained in the department; on the other hand,

Telegraph  
Department  
Workshops.

a considerable amount of manufacturing work is carried out similar to that already being done by many private manufacturing firms in the country. In this case especially, the argument regarding the greater economy of the government factories, discussed in the opening portion of this chapter, has been advanced. Even if particular articles have been manufactured more cheaply than they could have been bought, we cannot believe that this would hold good as a general rule, or, for the reasons already given, that it should dominate the action of Government. We recommend that these workshops should be maintained for the purpose of carrying out the assembly and repair of instruments and other technical appliances, but should not manufacture stores which can be made satisfactorily by competing firms; in our opinion these stores can usually be purchased more cheaply from private firms if a true comparison of price is made.

**Mathematical  
Instrument  
Office  
Workshops.**

80. The mathematical instrument office exists principally for the upkeep and repair of surveying and other instruments, and for the issue of instruments to government departments; it carries out the manufacture of certain instruments and is also responsible for the purchase of new ones. Most of its work is of a special character requiring a trained expert staff, but industrial firms have recently entered the field of scientific instrument manufacture, and are capable of producing efficient and satisfactory work. As in the case of the telegraph workshops, so we consider here that only such articles as cannot be obtained satisfactorily from indigenous supply should be manufactured by the department. The Indian workman has proved himself capable of carrying out work requiring great delicacy and accuracy, and Government can undoubtedly give much encouragement to this industry in particular by placing its orders with private firms in India.

**Public Works  
Department  
Workshops.**

81. We endorse the following observations made on this subject by the Public Works Department Reorganisation Committee in paragraph 29 of their report:—

“The same remarks apply, to a large extent, to the maintenance of workshops. We consider that there is no justification for the maintenance of workshops by Government except in the cases of temporary shops on large outlying works, where private enterprise is not available, and of small shops utilised solely for the execution of petty repairs. A workshop on any large scale can hardly be run economically unless the fluctuating demand for special work is supplemented by the more or less constant demand for standard articles, and it is particularly in regard to the latter that we consider government competition with private enterprise to be undesirable. The evidence that work executed in government shops is cheap is inconclusive in the absence of profit and loss accounts of these undertakings, and in the larger centres competition will prevent abnormal inflation of prices. An inquiry

into the workshop maintained by the public works department at Roorkee in the United Provinces led to its abolition, and there is less justification for the maintenance of such workshops in more advanced provinces like Madras. We therefore recommend that government workshops should be abolished, with the exception of those specified above, and private enterprise aided by the limitation of government competition and the addition of government trade to private trade. We realise that the abolition of the existing shops must be gradual, but we consider that the manufacture of articles of stock pattern therein should cease immediately, and that the use of such stock patterns should be insisted upon wherever possible."

82. The Indian Ordnance Factories include the Gun and Shell Factories at Cossipore and Ishapore; the Rifle Factory, Ishapore; the Small Arms Ammunition Factories at Dum-Dum and Kirkee; the Gun Carriage Factory, Jubulpore; the Cordite Factory near Coonoor; the Acetone Factory near Nasik; and the Harness and Saddlery Factory at Cawnpore. As regards these factories in general, we are of opinion that Government should maintain those which manufacture lethal weapons and such warlike stores as it is politic to continue to manufacture, either entirely or mainly, in government factories. But in respect of stores which can be looked upon as of ordinary manufacture, *e.g.*, harness, saddlery, clothing, accoutrements, carts, wagons, etc., the policy should be to distribute the work to private firms to the extent found practicable without loss of efficiency. The standard of work in government and departmental workshops is a high one; by diverting work of this nature to outside firms their standard should be improved by degrees, to the extent of their becoming competent to undertake commercial manufactures, which at present are beyond their scope. Further there are items of munitions, within the power of Indian firms to manufacture, the expenditure of which in war time increases to an enormous extent, and beyond possibility of being met by the ordnance factories alone, even allowing for recent extensions. Although sharing the peace requirements of such items with private manufacturers may, owing to the smallness of the orders, result in only an insignificant increase to a firm's business, yet this steady manufacture of certain types of munitions familiarises several firms with this class of work; consequently on the outbreak of war, the enormously increased requirements can be promptly met by the smooth and rapid expansion of the firms in question on the necessary lines.

**Ordnance  
Factories.**

83. This sharing of annual work orders with private firms involves two disadvantages to an ordnance factory. During peace time there is a lack of employment for the permanent supervising staff, which must always be maintained at a strength commensurate with the capacity of the factory. On the other hand, smooth

**Work to be  
shared with  
private  
firms.**



and rapid expansion of private firms to their full capacity on war work necessitates the upkeep during peace of specifications, gauges, patterns, jigs, etc., and it seems possible that this might afford employment to the staff of the ordnance factories. Moreover it is a general complaint that Government moves slowly, and, in an age of progress, official technical institutions are wont to deplore that, on this account, they are unable to keep pace with the times. Probably leisure on the part of an ordnance factory staff would afford the opportunity for research work which otherwise is not available, and on the whole this disadvantage might be ignored. The other disadvantage to the factory administration is that, on the outbreak of war, workmen of the desired standard may not be readily forthcoming to enable the factory to work at once at its full capacity; the point is one that cannot be appreciated exactly beforehand. The Committee are of opinion that, considering together the encouragement of Indian industries and the insurance for war purposes given thereby, the balance lies in favour of sharing the work with private manufacturers; and they observe that this recommendation is in accordance with the policy which has long been accepted in the United Kingdom.

For  
insurance.

84. We have discussed this matter with the responsible Army officers concerned, and find some of them averse to being required to give up any part of the work because the annual requirements in peace time do not fully occupy the government factories. Any sharing of work orders with private firms reduces the volume of work over which the irreducible overhead charges can be spread, and this might lead to unfavourable criticism on the part of the Finance Department. We have carefully considered this matter, and are of opinion that it should be regarded from a broader point of view as a matter of policy. It is admitted that ordnance factories must be maintained for strategical and insurance purposes; this being so, it is manifest that cost of outturn cannot be made the prime factor in coming to a conclusion. The lesson of the great war is that ability to expand the resources of the country, so that they may be able to meet promptly the enormous demands of the modern battlefield, is the first essential. To jeopardise this possibility by appreciating, as dividend earners, institutions which exist primarily for insurance appears to us to be shortsighted.

Harness and  
Saddlery  
Factory.  
Cawnpore.

85. The case of the Government Harness and Saddlery Factory, Cawnpore, is one which requires consideration. We are informed by the military authorities that the demand in India for leather of any description is so great, that there is little incentive for manufacturers to attain the standard of government requirements; articles rejected on an Army contract are readily saleable in the public market at even better rates, this, no doubt, accounts for the survival to the present day of the Harness and Saddlery Factory, in spite of previous recommendation to the contrary; but, with the industrial awakening of India, a change may confidently be anticipated. The numerous tanneries, which have recently come into existence, indicate India's desire to secure profits by competing in the world markets for

## CHAPTER VI.

## RELATIONS WITH LOCAL GOVERNMENTS, ETC.

Effect of  
Reforms.

91. It is necessary to take account of the altered position of provincial Governments due to the Reforms Act. The question has been considered by us in two aspects; first with reference to the legal position under the draft Rules which have been framed under the Government of India Act; and secondly with regard to the practical considerations which we think should be borne in mind. A good deal depends on the light in which the purchase of stores is viewed: it may be regarded as a 'subject' in itself, as the Government of India appear hitherto to have regarded it; or may, on the other hand, be viewed as an operation ancillary to the particular service for which the stores in each case are required. The draft Rules are at present only provisional, and we understand that our recommendations will be taken into account before their final shape is determined so far as concerns the purchase of stores. We observe that 'stores' has been provisionally classified as a central subject; while the following have been classed as provincial, those marked with an asterisk being also proposed for transfer to ministers:—

\* Medical Administration, including hospitals and dispensaries, etc.

\* Public Works, including light and feeder railways, etc., water supplies, irrigation, water-power and storage.

\* Agriculture.

Forests (\*transferred in Bombay only).

\* Development of Industries.

Minor Ports.

Inland Waterways.

Police.

Prisons.

All these subjects entail considerable expenditure in the supply of stores, we have seen (Chapter II, paragraph 12) that the expenditure on public works accounts for about 40 per cent. of the provincial expenditure, a percentage which is likely to increase with the expansion of light railways, educational buildings, and the improvement of roads, and construction of feeder roads which is certain to follow the increasing use of motor transport.

It is laid down in Rule 12 that:—

“subject to the provision of these rules provincial subjects shall be administered by the local Government. But, save in the case of transferred subjects, nothing in these rules shall derogate from the power of superintendence, direction, and control, conferred on the Governor-General in Council by the Act;”

and with this may be read the provisions of Schedule III—Rule 2—paragraph (vii), which states that:—

“ the previous sanction of the Secretary of State in Council is necessary to any expenditure upon the purchase of stores, either in the United Kingdom or in India, otherwise than in accordance with such rules as may be made on this behalf by the Secretary of State in Council ;”

Rule 47 provides that :—

“ the powers of superintendence, direction, and control, over the local Government vested in the Governor-General in Council under the Act, shall, in relation to transferred subjects, be exercised only for the following purposes namely :—

“(1) to safeguard the administration of central subjects.

“(2) to decide question arising between two provinces, in cases where the provinces concerned fail to arrive at an agreement.”

From a consideration of these rules it would seem that, if they were enacted in their present form, the Imperial Government would have complete control over local Governments as regards their purchases of stores, partly in virtue of Section 45 of the Act, and partly in virtue of Rule 47 which would enable control to be exercised over the purchase of stores for transferred departments.

92 We do not, however, regard it as a practical proposition that local Governments should be compelled to subject themselves in general to the guidance of the Indian Stores Department in respect of purchase of stores, but we consider that, at least as far as concerns stores of indigenous origin and local manufacture, it will only be in consonance with the spirit underlying the wide delegation of powers under the Reforms Scheme that local Governments should exercise complete freedom of action and should thus not be bound to conform to the rules prescribed for the guidance of imperial departments, or be forced, though they should be welcome if they so desire, to utilise the services of the Indian Stores Department. But as regards imported stores the case presents itself to us in another light. It will be clear, from the discussions in this report, that the development of Indian industries must depend to a large extent on the adoption of a wise stores policy, and we think it manifest that, if our conclusions as to the shape this should assume are sound as regards the effect of purchases for imperial needs, they must be equally so as regards that of purchases for other purposes. We hope, therefore, that, apart from all question of compulsion, it will be recognised by all concerned, that local Governments should be guided by the rules laid down by the Government of India regarding the purchase of imported stores, and that their demands should be made in conformity with the procedure proposed by us for imperial departments. For the foregoing reasons we are disposed to recommend that the purchase of stores should still be treated, for legislative purposes, as a ‘subject’ rather than as an incidental function of

Local  
Govern-  
ments.

administration; but that it should be divided, for the purpose of the rules under the Government of India Act, into two categories, namely:—

- (a) *Purchase of imported stores*, to be a central subject, controlled by the Government of India, and
- (b) *Purchase of stores of indigenous origin or local manufacture for provincial requirements*, to be a provincial, and, we think, a transferred subject.

93. Two members of the Committee (Messrs. Lalji Naranji and Milki Ram), while in general agreement with the principle underlying the foregoing observations, do not consider that the discretion of local Governments should be fettered in the matter of the purchase of imported, any more than in that of indigenous, stores. They are of the opinion that the policy of purchase, in both cases, should be left to the decision of the local Governments; though they anticipate that the conclusion these will arrive at will be in conformity with that indicated by the Committee, and therefore that they will readily adopt, in respect of provincial requirements of imported stores, the same rules and procedure as prescribed in the interests of the utilisation and development of Indian industries by the Government of India for the imperial services. It would follow, if this opinion be accepted, that 'stores' as a whole should be classified as a provincial (transferred) subject instead of being subdivided into central and provincial categories as proposed by the majority. In expressing this view, these two members are inspired both by a consideration of the policy of the Reforms Scheme, by which the majority have also been influenced though not quite to the same extent, and by the reflection that the purchases of imported stores for provincial requirements constitute a relatively small part of the aggregate purchases made by Government.

Views of Mr.  
Lalji Naranji  
and Rai  
Bahadur  
Milki Ram.

94. The freedom proposed in respect of local purchases may involve the possibility of some unnecessary expense being incurred by provincial Governments if they make independent purchases, but there will be the check of public criticism and in particular that of the provincial Accounts Committees. We do not attach much importance to the consideration that local Governments, acting independently, may be competing in the same market for stores of local manufacture; their purchases are seldom relatively so large as to make this a matter of great importance, and, beyond advising that they should take advantage of the option of using the Indian Stores Department we do not think the case needs to be legislated for specially. Local Governments will, no doubt, appreciate the facilities offered by our proposed organization for undertaking purchase and inspection on their behalf, and for meeting any wishes they may express regarding the steps to be taken in complying with their requirements.

Provincial  
Accounts  
Committees.

95. Similar considerations apply to companies working government railways which at present are free agents and make their own arrangements for the purchase of their requirements as explained in Chapter IV. The general consensus of opinion of railway witnesses is that, as regards imported stores, the companies

Company  
worked  
railways,  
Native  
States and  
quasi-  
public  
bodies.

should not buy through the Store Department of the India Office ; and that, as regards indigenous stores, the existing arrangements are satisfactory. We trust that, by its efficiency, the Indian Stores Department will impress these, and other *quasi*-public bodies, such as municipalities, city corporations and port trusts, with the advantages to be gained from utilizing the new agency. We suggest, however, for the consideration of Government that, according as their existing agreements expire, railway companies, if continued as managing agents for State railways, should be required to conform to the imperial system of procuring stores and use the Indian Stores Department for the purpose both in India and in the United Kingdom. No railway company should, however, be required to change their consulting engineers without the consent of their Board of Directors. It appears to us also that, should any Indian Native States desire to take advantage of the facilities offered by the new department, they should be free to do so on the same conditions as apply to *quasi*-public bodies and to such extent as they may desire.

Levy of  
charges.

96. We do not contemplate any charge being levied on imperial departments for the services of the Indian Stores Department. Our view is that the new department will bear the same relation to imperial departments in respect of stores as the provincial Public Works Department does to other departments of a local Government in respect of the erection of buildings required by them. In the case of provincial departments and railway companies we make the same recommendation, but for another reason. We recognise that it is customary for the central and provincial Governments to make a charge for services rendered by their respective departments to each other, and that under the Reforms Scheme the revenues of Provincial Governments will be, to a much larger extent than formerly, independent of the Government of India since they will retain control of provincial balances. Moreover, the Store Department of the India office at present debits local Governments with departmental charges for stores supplied to them. We, however, consider that, as an inducement to local Governments and railway companies to make use of the new department, this charge might well be waived, and we think this concession a small price to pay for securing their co-operation. In the case of Indian Native States and *quasi*-public bodies such as municipalities, we do not consider that there exist sufficient reasons for departing from the ordinary practice of Government, and we think they should be expected to make a reasonable payment for the services rendered to them ; this should be determined by the ratio between the actual annual cost of the department and the value of the stores dealt with by it. In regard to public works made over to local bodies for construction and maintenance, we recommend that they should have the same facilities for dealing with the Indian Stores Department as the Public Works Department. The policy of the Government of India is to encourage the transfer of public works to local bodies, and it is eminently desirable that there should be no deterioration in the standard of work. The grant of facilities to deal with the Indian Stores Department free of charge will be of assistance in maintaining the standard.

## CHAPTER VII.

## INDIGENOUS STORES.

97. There is less room for complaint of the policy laid down by Government in respect of the purchase of indigenous stores and locally manufactured articles, than there is of the manner in which that policy is to a large extent defeated, owing to the complication of the rules in which it is embodied, and the absence of information and facilities necessary for carrying it into effect. The Stores Rules principally concerned are Rules Nos. 1, 2 and 10, reproduced in Appendix C. It will be seen that these give the preference to the use of locally produced goods, subject however to conditions, one of which involves a comparison of price between the articles in question and the cost of similar articles imported through the India Office. We deal in Chapter XI of this report with the prescribed method of comparing quotations which we consider unfair in detail, but apart from this we observe that it is difficult for the indenting officer to make such comparison at all; he frequently lacks up-to-date information on some of the factors affecting it.

Unsultability  
of Stores  
Rules.

98. Moreover, as we have already remarked in Chapter IV, individual consuming officers and departments are usually hampered in obtaining their requirements from Indian suppliers. Doubtless they know what is produced in their immediate vicinity, and such goods as they can themselves see, and inspect, can readily be purchased by them. But their information as to what is produced in more remote parts of India is necessarily scanty and defective; while even if an officer knows that a particular kind of manufacture exists beyond his own circle he has no means either of knowing whether, at any particular time, the capacity of the existing factories is fully engaged on other orders, or of ensuring inspection during manufacture or before delivery. The latter disability is one of peculiar importance in a country like India, where dealings must necessarily take place largely with new and untried firms which may not previously have had an opportunity of working up to the standard of quality required by government departments. The indenter is at once ill-informed as to India's resources, and ill-equipped to make use even of such resources as are within his knowledge. The result is summed up in the observation, quoted in the first paragraph of this report, that "indenting officers have, in practice, been too often deterred by the risk involved in purchasing in India in the absence of an expert purchasing and inspecting agency." They are constrained by the conditions described to send to the Director-General of Stores, India Office, demands for goods which, with better facilities, they might obtain of Indian manufacture; and these conditions contribute to the continual use of imported goods instead of those of Indian manufacture. There can be little doubt that not only are Indian industries thus discouraged, but also that actual loss of money and inconvenience to the public service is caused.

Want of  
information.

99. Another defect of the existing system, or rather lack of system, is that such purchases as are made in

Inter-  
departmental  
competition,

India are made by a large number of different officials, whose competition must, at least in some cases, lead to enhancement of prices. We do not, however, desire to lay great stress on this particular aspect of the case, since the country is so large, and its resources in general so wide if properly appreciated and utilised, that a moderate amount of competition by government purchasers, who must in any event compete with numerous private persons, is in our opinion unlikely to have a very marked effect; any attempt to obviate it completely would probably involve difficulties and expense incommensurate with the advantage secured. In our subsequent recommendations it will follow that, though centralising the purchase of certain kinds of stores to a considerable extent, we do not go as far in this direction as might at first have been expected.

Remedy.

100. What is clearly necessary is the establishment of an expert agency in India, which shall be so equipped that it will know what are the manufacturing resources throughout the country, and keep pace with their development; which will be able to purchase efficiently within the country, utilising the most appropriate market for particular demands; which will be able to carry out such inspection of goods under manufacture, or supply, as may be required; and whose services will be freely available to all consuming imperial services and to such provincial departments, and *quasi*-public bodies, as may desire to take advantage of them. This organisation, which in this report we refer to as the Indian Stores Department, must not only render these services in full to those who desire them, but must go further, by way of helping those who will still make their own purchases, by supplying these officers with such reliable and up-to-date information as will enable them to know where in India their requirements can be obtained, and by helping them in effecting such comparisons of cost as they should make in order to determine where to place their orders, and by providing efficient inspection. This department, in conclusion, must not only be able to render these services to consumers; it must further have authority and facilities for preventing orders, which, under the accepted policy of Government, should be placed in the country for goods of local production, from being placed outside. The requirements indicated above are so manifest, and so little open to dispute, that the statement of them in our report naturally occupies a brief space as compared with the discussion of other, and more complex, questions with which we are also concerned; we desire, therefore, to make it clear that the importance, which we attach to them, is not to be judged by the relatively short space assigned to them in this chapter. In designing the organisation, which is dealt with hereafter, we have kept prominently in view the fact that it is of the first importance that it shall meet the desiderata indicated above; and be capable of ensuring that Government shall, in future, not only profess the policy of utilising local industries to the utmost, and of purchasing their products in a businesslike manner, but shall also be in possession of the machinery necessary to carry that policy into effect.

Encourage-  
ment and  
protection of  
industries.

101. The measures thus framed will obviate a recurrence of the complaint that Government do not take proper advantage of those industries, already established

in India, which are in a position to compete with foreign manufacturers. It must be accepted, as a general postulate, that all transactions in connection with the supply of government stores should usually be governed by ordinary commercial principles. But the object of Government will only be partially attained unless a further advance is made in the direction of encouragement of local manufactures, especially in the initial stages of their enterprise, and of assuring them a reasonable measure of protection against the effects of accidental changes in conditions, which may at any time turn the balance in favour of extraneous sources of supply. We desire, therefore, to offer the following remarks under the heads of encouragement and protection of industries. It is clear that encouragement for a limited period may enable a nascent, or struggling, industry to cross the border line between failure and success, and to become established on a firm footing, with resultant advantage both to itself, and to the country whose resources are thus expanded. It would not be within our province to comment on some of the special measures of assistance which have been discussed by the Indian Industrial Commission. For instance, the financial help that may be afforded by industrial banks; and the technical assistance that it is the intention of Government to render (and which they have already begun to give in some instances) through the advice of experts in particular industries, as in the case of tanning, bootmaking, glass manufacture, are matters which hardly fall within our province, though we would invite attention to the observations in the preceding chapter on the co-operation of the expert inspection staff with other industrial advisers. But there are certain direct ways in which Government can materially assist local manufacturers. These are:—

- (a) by guaranteeing orders for a definite period;
- (b) by placing orders at specially favourable rates for a limited time;
- (c) by securing favourable railway rates.

102. The first is a measure which can be adopted without much difficulty, though, if used too liberally, it may tie the hands of Government and discourage competition. It is particularly suitable to a new enterprise which requires a definite prospect of a steady demand for the goods to be produced. In such a case, it may be desirable for Government to pledge itself to buy a definite quantity of the goods throughout a considerable future period, subject to reasonable conditions as to price and quality. This form of guarantee was adopted in the case of at least two large Indian enterprises, which are now of the first importance and utility. We see no objection to the frequent adoption of this course when it seems desirable to afford encouragement to a form of industrial enterprise not already represented in the country. The conditions of different industries are so various that we do not think it practicable to lay down any precise rule to govern the exercise of his discretion by the Director General of Stores in guaranteeing assistance of this kind, and we think that it must be left to his judgment to determine whether, or not, to refer any particular proposal for the orders of Government

**Guarantee of  
orders.**



**Favourable rates.**

103. The propriety of granting assistance in the second way, by placing orders at specially favourable rates, is more open to question: it would seem peculiarly applicable to cases in which the difficulty may have reference, less to the nature and duration of the firm's initial commitments, than to the fact that, until experience has been gained by the managing staff, and technical skill by the work people, the firm cannot hope, at the outset, to produce goods at a price that will compete with that of foreign manufacturers. This form of assistance amounts practically to a subsidy, and we consider that the correct principle to adopt is that the additional cost involved should not usually fall on the consumer, but be allocated to a special head from which grants should be made by the Imperial, or local Governments, as the case may be. When assistance under this head is granted by a local Government the matter should be arranged between the Director of Industries and the provincial agent of the Indian Stores Department concerned. We may mention here an analogous suggestion that has been made by some witnesses, namely that Government should be prepared to acquiesce, for a time, in the acceptance of goods of inferior quality in the expectation that a progressive improvement may be expected. We do not think that unsuitable goods should be accepted for such reasons in any circumstances. But there is obviously room for the exercise of judgment; as, though it may be impossible to procure goods of Indian manufacture which are up to the same standard as certain imported goods of the same kind, it will frequently be possible to procure Indian goods which can be utilised for the purpose to be served, and we think that the locally made articles should be given the preference in such cases.

**Railway rates.**

104. As regards the grant of favourable railway rates, we feel that the most we can do is to point out that distances in India are great and that consequently the cost of inland transport frequently has a considerable effect on the comparison of price between indigenous and imported articles; since practically all railways are the property of Government, we consider that more practical effect might be given to the expressed wish of Government to encourage Indian industries by the quotation of favourable rates to a greater extent than has hitherto been the custom. We understand that, in the past, the policy of quoting favourable rates to and from the major ports has, on occasion, resulted in a direct advantage to foreign goods to the disadvantage of Indian manufacturers. As an illustration it may be mentioned that concessions are allowed from the port of Bombay to Lahore, Delhi, and Cawnpore, to the advantage of importers of foreign goods, while manufacturers in the vicinity of Bombay, *e.g.*, Jalgaum, have to pay much higher rates to get their goods to the above-named markets.

**Protection.**

105. Turning now to the question of protecting existing industries, it would be difficult to exaggerate the importance to be attached to ensuring that existing industries, on which much capital has already been expended, and which give employment to large numbers of skilled workmen, are not compelled to close down on account of factors, over which they have no control,

introducing unforeseen competitive conditions. An example of such an occurrence is afforded by the effects of recent fluctuations in the exchange value of the rupee; previous to the rise in exchange, when the rupee was practically stabilised at 1s. 4d., Indian manufacturers generally asked for a fair field and no favour, and were willing to supply Government with such stores as they manufactured in competition with imported stores and on equal terms. They feel, however, that the altered value of the rupee introduces a factor which, in some cases, renders it practically impossible for them to hope to compete with foreign manufacturers, and which, therefore, must involve them in serious losses, unless Government can adopt some measure of protection. (In this connexion we would refer to the observations in Chapter V regarding government factories). The question affects the further development, as well as the maintenance, of industries. Any failure of Government to extend, in such adverse circumstances, a reasonable degree of assistance to undertakings, which have already been established, must have a definitely deterrent effect on new enterprise. It must be borne in mind that, in some instances, the existing industries to which we refer have been established almost wholly with the object of meeting the demands of Government for particular classes of manufactures. The training of Indians in the engineering profession has recently received the attention of local Governments, and schemes are already being launched for the establishment of technical schools. Technical education in schools is only of value when combined with practical workshop experience, and workshop experience is only possible when factories exist, and are maintained, for the manufacture of such stores, material, plant and machinery, as the country is capable of producing. It is, therefore, the duty of Government, in the interests of education alone, to see that existing industries are supported as far as possible with government orders, and that the establishment of new industries receives every encouragement.

106. The problem is thus one of genuine importance, and, though the consideration of some of its aspects must involve an excursion into a region with which most of the members of the Committee are unfamiliar, we feel that, in view of the primary object of Government in appointing us, namely the encouragement of Indian industries, it would be a serious failure on our part were we to omit to place the matter prominently before Government. We do not think that the fundamental consideration of economy can be overlooked, but we urge that it must be regarded broadly from a national point of view, and not merely from the standpoint of rupees, annas and pies; attention must also be devoted to the advantages that can be secured to the country by encouraging the spread of industrial education, and by ensuring the establishment of more convenient sources of supply. Experience during the past few years has abundantly shown the benefits to be derived, during war conditions, from the existence of indigenous resources, and the inconveniences, which might well prove disastrous on another occasion, caused by their absence. We feel, therefore, that the question of protection of Indian industries as a means of maintaining those

**Fiscal  
measures.**

already established and of encouraging the extension of others is a matter which urgently demands attention. The most obvious remedy is the adoption of such fiscal measures as will achieve the end in view; and some members of the Committee are emphatically of the opinion that this solution should be pressed upon the attention of Government. They urge that such excise duties as are at present imposed on manufactured articles in India should be removed, and that import duties should be levied on manufactured articles imported from outside India. These views will no doubt be fully considered by those who, we understand, are separately taking up the examination of the fiscal policy of the Indian Empire. Other members of the Committee, while agreeing that the most comprehensive and direct remedy for the position is that indicated above (especially if an import duty can be so regulated as to apply to imported articles which compete with local manufactures but not to those which, for the time being, must be imported because similar goods are not produced locally) are of the opinion that a measure of more immediate applicability is available, and should be adopted so far at least as relates to the purchase of government requirements. They consider that Government should rule that, when a comparison of price quotations is the deciding factor between the purchase of imported and locally manufactured articles, this comparison should be made at an assumed rupee exchange value which should represent the rate at which Indian industries may fairly be expected to compete on their merits with foreign manufacturers. They consider that, in existing conditions, such a rate might fairly be taken as one rupee equivalent to one shilling and six pence, as a maximum. The Committee as a whole recognise that the question is a difficult one, and that it is easier to criticise any particular solution than to suggest a better. We are at least unanimous in pressing the matter upon the attention of Government as one, the decision regarding which must vitally affect the industrial prosperity of the country.

**Assimilation  
of contract  
conditions.**

107. There is one other point bearing on the encouragement and protection of industries established in India, which appears to us to require special mention. It has been brought to our notice that special provisions are attached to contracts entered into with firms in the United Kingdom with the object of ensuring due allowance being made to, or by, the firms for variations in rates of wages or cost of certain materials. No such provision is usual at present in contracts made with manufacturers in India, who are thus placed in a position generally less advantageous than that of their competitors in the United Kingdom. It is only necessary for us to advise that, when competition may occur between manufacturers in both countries, the conditions of the contracts should be as nearly as possible the same in India as in the United Kingdom.

## CHAPTER VIII.

## IMPORTED STORES.

108. In the preceding chapter, we have dealt with the question of purchasing those stores which are already manufactured or produced in India, and which should, *prima facie*, be bought to meet Indian requirements in preference to imported stores of the same kind. We now have to consider another important class of stores, namely, those which have to be imported from time to time, because there are no similar articles of local origin or manufacture available to meet the demand. As regards these imported stores the question for consideration is not the propriety, but the best method, of purchase. This question involves many conflicting considerations and requires therefore to be examined at some length. It is of greater importance, from the point of view of Indian industry, than may at first be realised, because, by adopting a suitable method of purchase for such imported goods, Indian industrialists may be led by degrees to embark on the manufacture of similar articles, the trade in imported goods thus leading naturally to a development of local industries. Hitherto, as indicated in preceding chapters, imported stores have, for the most part, been purchased through the agency of the Director General of Stores, India Office. The Stores Rules of 1913, it is true, allow of purchases being made in India to a limited extent but subject to various restrictions, the effect of which has been to discourage local purchases even in cases in which they may be strictly covered by the rules. This discouragement is enhanced by the difficulty in practice of applying the rule, unfair in itself and which incidentally we shall propose to revise, necessitating a comparison of price to ensure that the cost of imported articles, locally purchased, shall not exceed the price of similar articles bought through the India Office. To a large extent the difficulties experienced by individual indenting officers in buying stores of local origin beyond their immediate neighbourhood in India, which have been discussed in the preceding chapter, apply also to the local purchase of imported goods. In effect, under the Stores Rules as they now stand, and in the existing absence of special facilities for purchase and inspection, officers find themselves practically compelled, except in cases of urgent need, to take the line of least resistance and to indent on the India Office for the bulk of their requirements of imported stores. It will be seen from the statistics quoted in Chapter II, that, in normal times, imported stores form some 50 per cent. of the whole requirements of the public services, but that less than one fifth of these stores are actually bought in India, the balance being purchased through agencies in the United Kingdom. It is true that the proportion of local purchases was much increased during the war period, but the conditions then were of course exceptional, and no comfort can be derived from the occurrence of such abnormal variations.

Their  
importance.

109. From a consideration of past experience, as brought out by the evidence received, we have already drawn the conclusion that the time has come when the artificial restrictions of the Stores Rules should be

Wider  
purchase in  
India  
recom-  
mended.

withdrawn, and that full freedom should be exercised by India in the matter of stores purchase. We endorse the finding of the Industrial Commission, that the present methods of purchase of stores has had a deterrent effect on attempts to develop new industries, and that a radical change should be made in the methods of purchasing in India; and we share the view of the Public Works Department Reorganisation Committee, that the rules governing the purchase of stores militate against the success of local manufactures and the establishment of further ventures, and, in their opinion, adversely affect the working of the Public Works Department. Rules, however well intentioned, if they are so complicated and so difficult to work that they throw all the weight in the scale in favour of a particular method of purchase, seem to us to be clearly out of date, and we cannot ignore the volume of evidence which we have accumulated in favour of their revision. Indian opinion, and that of representatives of the British commercial community, are alike largely in favour of a policy of obtaining practically all imported stores through local importing firms rather than through the India Office; while indenting officials, though they recognise the efficiency of the Store Department of the India Office, have generally urged at least the need for greater elasticity in the Rules. Without any desire to magnify trifles, we may yet claim that there is a certain significance in such incidents as the inclusion in an indent on the India Office of a demand for one fish-hook at an estimated cost of one penny, and of an indent for chemicals, to the value of a few pounds, which contained a dozen items each of less value than half a crown; these serve to illustrate the paralysing effect of rigid rules. We consider that the general principle which should govern the purchase of imported stores is that advantage should be taken of the cheapest market in which suitable articles can be obtained, due consideration being given to cases of urgency or special advantages. We have not thought it necessary to consider which of the possible sources of supply is likely to prove the most advantageous, since, if practical effect is given to the above principle, each source will depend on its merits. We recommend, therefore, a discontinuance of the policy reflected in the Stores Rules of 1913, *i.e.*, that stores should, as a general rule, be obtained through the Director-General of Stores, India Office, and that purchase in India is the exception made under special conditions, and then only when the article is actually in India at the time of order. We consider that this condition should no longer hold good and we have recommended in the revised stores rules, proposed by us in Chapter XI, that purchase of all stores should be made in India when articles of suitable quality and reasonable price are procurable in the local market. This proposition is not a novel one; it was declared by Lord Salisbury in 1876 to be the policy of Her Majesty's Government, and we cannot but observe that purchase in England, which has held the field since 1880, has not led to that encouragement and expansion of Indian industry which was so confidently hoped for.

110. To arrive at a clear idea of the scope of freedom which we think should be exercised by those in India who will be responsible for the purchase of

imported stores, we have reviewed the various methods which may be employed ; and the principal arguments in favour of, and against, may be briefly stated. For practical purposes these are covered by four heads :—

- (a) a London agency ;
- (b) accredited branches or agents in India of British manufacturing firms ;
- (c) merchants or middlemen in India ;
- (d) direct purchase from manufacturers abroad.

111. Such an agency already exists in the Director General of Stores, India Office ; and, for railway companies, in their Home Boards of Directors. It offers advantages in having a wide field of selection in which to obtain competitive tenders for all kinds of goods ; in its close touch with manufacturers in the United Kingdom and its local facilities for inspection, payments, checking delays, etc. ; on the other hand, it is remote from indenting officers and out of touch with Indian conditions. It is a general complaint that supplies through this agency, though satisfactory in quality and price, tend to be slow and thus cause considerable administrative inconvenience, and to involve the unnecessary locking-up of funds in reserve stocks. Such an agency obviously can do nothing to encourage the substitution of local manufactures in India for the importation of goods from abroad.

London  
agency.

112. This channel of supply consists of :—

- (i) Accredited Indian branches of approved British manufacturing firms able to tender not only for the sale of technical stores, machinery or plant, but also for the installation and guaranteed satisfactory working of the plant they supply. They should have technical experts on their staff and should employ Indian workmen.
- (ii) Accredited technical agents of approved British manufacturing firms who are already in India and employ Indian labour in the manufacture and repair of technical stores, machinery and plant, and who are able to tender not only for the sale of such technical stores, machinery or plant, but also for the installation and satisfactory working of the goods they supply.

Branches  
or agents.

The utilization of such agencies clearly promises certain decided advantages, notably the availability of expert advice which is at the disposal of prospective customers ; the full grasp of local conditions ; the rapid supply of requirements, which will frequently be obtainable from local stocks ; and assistance in erection of plant, etc., and in its maintenance in service. Possible disadvantages lie in the limitation of the field of enquiry and consequent increased cost, and in the difficulty, which can however be avoided by using the London stores agency, of arranging for the inspection of goods during manufacture. From the point of view of development of local industries there is much to be said in favour of encouraging the establishment, and of the freer utilization, of such branches and agencies. As



desirable to adopt the course of direct purchase from foreign manufacturers. We consider that the services of Indian branches and agents of British manufacturers should freely be utilised for the purchase, at least, of particular articles in respect of which they are in a position to offer special facilities, and that the services of local merchants and traders should be utilised as far as can advantageously be done for the purchase of imported general stores. We anticipate that the effect of our recommendations as a whole will be a considerable reduction in the demands made on the Director General of Stores, India Office. Those demands will in fact be reduced in two distinct ways; by the immediate and final interception of demands for imported stores which can be replaced by stores of Indian origin; and by the increasing purchase in the country of English stores.

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## CHAPTER IX.

## INSPECTION.

Importance  
of quality.

116. The suitability, in point of quality, of goods purchased is obviously a question of the first importance. We have alluded to the difficulty experienced at present by many departmental officers, owing to the lack of an organisation on which they can rely to inspect goods bought for them in India. This difficulty should disappear with the establishment of the Inspection Branch of the new department. In the special conditions of Indian industries it must be recognised that the duties of the inspection staff will by no means be confined to a mere examination of goods offered for acceptance. One of the main functions of the Indian Stores Department will be to raise the standard of Indian manufactures, and the inspection staff will be directly responsible for assisting indenting officers in the preparation of designs and specifications; for accepting and sealing patterns; and for urging, within reasonable limits, the standardization of the requirements of different services. It will be their duty, not merely to detect faults, but also to point out to suppliers the exact directions in which their products are defective, and can be remedied, so that steps may be taken to improve their manufacture. The superior staff will thus, to some extent, fill, in respect both of suppliers and customers, the position held at Home by the Consulting Engineers; routine inspection will generally be carried out by the less highly qualified staff.

Necessity  
for  
inspection.

117. The necessity, in the interests both of efficiency and of ultimate economy, for expert inspection of many stores is universally recognised, but where to draw the line as regards inspection is a matter on which opinions differ widely. We have carefully considered the question whether every description of stores requires expert inspection, either during manufacture or on delivery. Several witnesses expressed the opinion that, for what may be described as stores bought over the counter, and for articles of standard pattern, only common sense inspection, such as any one is qualified to make, is necessary, and that unnecessarily rigid inspection causes irritation and results in suppliers quoting higher prices. Others are emphatic in the opposite view, maintaining that, in all cases, only an expert can be trusted to ensure value for money paid. We are of opinion that the latter view is the more correct, and that, while it is possible to overdo inspection (a point against which it is necessary to guard), it is essential to bear in mind that an inspector's utility should not end with the rejection or acceptance of stores tendered. We consider therefore that inspectors should be provided for all classes of stores. Manufacturers should be required to supply up to standard; departments should not be forced to accept available goods of inferior quality. Standardization is a means to mass production making for economy, and, where military stores are involved, it is an insurance towards rapid supply and ability to meet the greatly increased

demands of war time. The reports of inspectors as to the capacity and reliability of contractors should greatly assist Controllers of Purchase in placing contracts. In purchasing stores the private individual has, no doubt, usually to rely on his own inspection, but his case is not similar to that of the purchaser of government stores. If the individual makes a mistake, or is defrauded, he retains a lively recollection of the fact, and is not likely to repeat the error. Provided, however, government stores are sufficiently near standard not to excite adverse comment on first issue, there is little real check on their subsequently lasting for a reasonable period. Assuming the cost of inspection does not exceed three per cent. (it will probably be considerably less), and bearing in mind the advantages enumerated above, which are incidental to the existence of inspectors, we have no hesitation in recommending inspection for all descriptions of stores on the score of economy as well as of efficiency.

118. The method of inspection must vary with the nature of stores; some require inspection during manufacture as well as on completion, while for many the latter alone suffices. For the former, inspection must be carried out in the maker's works; for the latter, either before despatch, or on receipt by the consumer, but, except for heavy or bulky articles, it can usually be best arranged for in special depots provided for the purpose. It will be necessary, therefore, in our opinion, to maintain inspection depots as well as a staff of travelling inspectors. After consideration of the advice we have received on this point, the stations we recommend for inspection depots are Calcutta, Bombay, Madras, Lahore, Cawnpore, and Rangoon. These combine the advantage of being large or growing manufacturing centres with proximity to military factories and arsenals and to central stores of other departments. These depots will receive all stores which are not inspected at the makers' works, or for which arrangements are not made for inspection at the consignee's receiving depot. After inspection at the depots, the stores will be packed and consigned to their respective destinations. The depots must be large enough to deal efficiently with the maximum volume of stores they will be called on to handle, with room for reasonable expansion, and with good road and railway communication. In the presidency towns, where rent will be very heavy, it is not essential to locate these depots in the business centres; the cheapest suitable site should be selected, and, if possible, existing inspection depots, or other available areas, should be utilised. We visited the Ordnance Inspection Depot at Hastings, and consider it convenient in respect of road, railway, and river communication, and also as regards proximity to the Clothing Factory, Alipore, which has been suggested as a probable suitable site for the headquarters-office in Calcutta. In Bombay, we understand there is available a suitable site in the old Gun Carriage Factory, Colaba, lately occupied by the Clothing Department, which possesses some good buildings and sufficient space; a railway siding and a dock adjoin this site. While inspection will, as far as possible, be confined to manufacturers' works and inspection depots, it must on occasion

Inspection  
depots.

be carried out at destination. For example, tents, which are manufactured in great numbers at certain arsenal stations, will most conveniently be inspected in the arsenal itself since, on account of their bulk, it is impracticable to send them to an inspection depot in the first instance. Travelling inspectors will be utilised on these occasions.

**Pattern  
rooms.**

119. At each inspection depot a pattern room will be maintained, where standard specifications, and approved samples, of all articles likely to be procured within the commercial area served by that depot will be stored, and where firms wishing to tender for any article will obtain information as to its exact nature, etc. In a country of the size of India, it is clearly not possible for one such pattern room to suffice as is the case in England.

**Absorption  
of existing  
inspection  
staff.**

120. In recruiting the establishment of the inspection depots, we contemplate the absorption of a portion of the inspection staff at present employed by the Director-General of Ordnance. This staff is charged with the inspection of, and allied duties connected with, all stores manufactured in the Ordnance Factories, and a special branch, under a Chief Inspector-General of Stores, exists at Cawnpore for the inspection of all other ordnance stores purchased in the country. The responsibility for inspection of all stores manufactured in ordnance factories will remain with the Ordnance Branch, and no personnel or premises devoted to that purpose will be available for transfer. There is however a diversity of opinion regarding the responsibility for inspection of the stores purchased in India. A minority of military witnesses emphatically contend that this must remain with the military authorities. The majority however acquiesce in inspection, by the Indian Stores Department, of all such stores, subject to the condition, which is reasonable and to which effect can readily be given, that the inspectors should undergo training at an Ordnance Factory in regard to articles which, on account of their use under military conditions, require special experience. We find nothing to support the view of the minority, who admit that no fault can be found with the quality of the stores purchased through Director-General of Stores, India Office; and we contemplate an efficiency, equal in all respects, in the Indian Stores Department.

**The Army.**

121. We consider that, for the Army, liaison officers will be required in connection with inspection, the drawing up of specifications and sealing of patterns; since, though the stores dealt with by the Indian Stores Department would be confined to trade stores, there are often conditions, attaching to their use for military purposes, which require special attention. We understand that, as a result of the war, the work of drawing up specifications, sealing patterns, etc., has very considerably increased, and that the military authorities would prefer to retain the branch of their inspectorate at present located at Cawnpore. It is pointed out that their staff is experienced in these duties, and it is natural there should be reluctance to hand over work requiring special technical knowledge and experience until the new department has proved its efficiency. We however

see no reason why, when this has been attained, it should be necessary to retain a separate military inspectorate. The Army authorities will be able to appoint as many liaison officers as they consider necessary, and should thus be able to safeguard their interests in all essential matters; these liaison officers will be available to act as referees if any military stores are objected to by receiving, or consuming, officers. It appears to us that liaison officers in various parts of the country, at least one with each Command, would be both more convenient, and of more practical value, than a small inspectorate concentrated at Cawnpore; the cost would probably not differ much in either case, and we commend the matter to the consideration of the military authorities. Our view of the situation is, that, while the military inspectorate would survive as long as may be necessary, its eventual absorption should be contemplated at once, and wherever possible this should be given effect to from the commencement as regards both personnel and premises.

122. In the case of other government departments, such as Railways, Public and Military Works, there are already officers qualified, in most cases, to draw up complete detailed specifications of what they actually require; this they should continue to do. The duty of the Inspection Branch of the Indian Stores Department, so far as such specifications are concerned, should be to give advice or assistance when approached, and to point out in what way these might be brought into accord with those accepted for similar articles by other departments, in the interest of standardization. The same procedure should apply to scaled patterns which, in most cases, represent stores for which there are no written specifications. Evidence has clearly indicated that different types of stores are used by various government departments to fulfil the same function, which results in much unnecessary expenditure; in such cases standardization, in consultation with consuming departments and manufacturers, should be the duty of the Inspection Branch. When departments are unable themselves to draw up working specifications, or to furnish patterns, of their requirements, it would be the duty of the Inspection Branch to act as consultants, or advisers, and to furnish them with information and advice.

Railways,  
Public  
Works, etc.

123. In paragraph 116, we stated that the superior staff will to some extent fill the position of Consulting Engineers. With the expansion of manufactures in India, and of purchases by the State and by the public, the time is no doubt approaching when individuals, or branches of established firms, may be expected to set up in practice as consulting engineers in India. Should this occur, we anticipate that it would be advantageous for Government to utilise the services of these firms for the purposes of advice and inspection, following the practice of the India Office and the Boards of Directors of Indian Railway Companies in London. It would encourage the substitution of private, for State, enterprise in this direction, a development as desirable on general grounds in this field as in others; and moreover it would enable a proportionate reduction to be made

Consulting  
engineers.

in the cost of the organisation suggested by us for the inspection side of the Indian Stores Department, by the transfer of some of its functions to firms of consulting engineers. The representation in India of eminent British firms of consultants would also furnish a desirable measure of continuity in policy, and unity of standards.

**Nucleus for  
inspection  
staff.**

124. We anticipate no difficulty in the organisation of an inspection branch to carry out the duties of the initial scheme described in Chapter XII. The gradual absorption of the military inspectorate would afford a useful nucleus for textile and leather goods and their respective allied stores; and for timber, the necessary officers and staff should, we consider, be obtained as far as possible from the Forest Department; while for railway sleepers, one or more men with practical railway experience will be required. The organisation, for the inspection of engineering stores of practically every type, with the Test House and Laboratory for the inspection of such stores as cement, oils, paints, and varnishes, which exists in Calcutta under the Superintendent of Local Manufactures and Test House, Alipore, will also be absorbed.

**Test  
houses.**

125. We were impressed by the evidence offered by several witnesses regarding the important part which government test houses play in the industrial development of India, especially by helping to break down the prejudice, which is undoubtedly prevalent, against anything produced in India by the confidence inspired by an absolutely independent and disinterested certificate of quality. Several large manufacturing firms have facilities in their own works for the practical test of the materials they use; the tests thus carried out, though of great value, cannot be reckoned as guaranteeing a universally accepted standard. The Alipore Test House and Laboratory have supplied a long felt want in this direction, and should, we consider, not only be maintained, but be raised to such a state of efficiency as to provide for India an institution corresponding to the National Physical Laboratory at Kew, and to furnish tests which are universally accepted without question. The witnesses consulted on the matter were unanimous that a test house in Bombay would receive ample custom to justify its existence, and would be much appreciated by private manufacturers and firms. We therefore recommend that the establishment of a test house in Bombay should receive immediate consideration. It should be equipped on the same lines as the Test House at Alipore, and be developed in accordance with the needs of the locality. Some witnesses expressed the opinion that a test house in Madras also would prove useful, and might justify its existence; but the necessity was not so insistently pressed as in Bombay and we consider that the establishment of a test house in Madras may be left for later consideration.

**Chemical  
labora-  
tories.**

126. We have provided, in our initial organisation, for the maintenance of the existing Chemical Laboratory at Alipore, and we consider that such laboratory, capable of carrying out reliable practical tests and analyses, will probably be always required allied to the mechanical test house. The facilities provided by the

proposed Chemical Department in this direction will, however, be a factor which will have to be taken into consideration.

127. On the establishment of works for the manufacture of steel sections and rails at Jamshedpur a highly qualified Metallurgical Inspector, with the necessary staff, was appointed to advise regarding specifications, and to carry out the physical and chemical tests essential to ensure that material of the requisite quality was produced. We desire to draw special attention to the results in this case as a definite proof of our contention of the advantages of really efficient and expert inspection. In Chapter XII, on the organisation of the Indian Stores Department, we recommend that the Metallurgical Inspector and his department should be absorbed in the Inspection Branch. That department is at present well staffed and organised, and in every way efficient for the work it is called on to perform. We cannot, however, exaggerate the importance of efficient inspection under this head, and, with the further development of the steel industry in India, the Metallurgical Branch will need such amplification as may be necessary to cope efficiently with the increased work.

Metallurgical.

## CHAPTER X.

## SHIPBUILDING.

Its importance.

128. An important section of the government requirements, covered by our terms of reference but which requires separate treatment on account of its special character, is that of ships, and we have devoted consideration to it in consultation with representatives of the Royal Indian Marine and of shipbuilding firms. In view of the extent to which this industry has already been developed in the country, it is a subject to which the general considerations discussed in Chapter VII largely apply but, as the purchase of ships for government departments is governed by special rules, it will be more convenient to deal with the matter in a self-contained chapter of the report. The shipbuilding industry of India is centred chiefly in Calcutta, although shipbuilding yards also exist in Bombay, Kāraachi, Rangoon and Madras, and to a lesser extent at some of the smaller ports round the coast. The industry relies principally on private firms, companies, and *quasi*-public bodies for its support, as, hitherto, very few orders for river, or sea-going, craft have been placed by Government on private firms.

Present conditions.

129. The sections required for the framework of steel vessels can, for the most part, be obtained from indigenous sources of supply, but up to the present it has been necessary to import the materials for shell plating. It is anticipated, however, that within the next two years, plates will also be manufactured in India, thus rendering possible the building of the complete hull from Indian manufactured materials. Considerable progress has recently been made in engine manufacture, and plant is being laid down for the construction of marine boilers; it would appear then that, in the near future, it will be possible to build and equip ships entirely from locally manufactured materials. Firms in India are now engaged in building all classes of vessels required for river service, such as cargo boats, jute flats, motor boats and steam launches, also sea-going vessels, such as fishing boats, pilot vessels, and cargo ships; a sea-going passenger ship of over 200 feet in length has recently been launched. It has been contended that vessels designed and built in India might not embody the latest and most economical improvements introduced in shipbuilding in the United Kingdom; but witnesses from private firms have pointed out that, owing to the publicity given to any improvements in shipbuilding and in marine propulsion, through the medium of the technical and scientific press or by Home representatives of Indian firms, the designers and builders in this country are not likely to be behind-hand in their knowledge of the latest improvements; moreover, it does not follow that the latest improvements necessarily emanate from the United Kingdom. In most cases, an expert knowledge of local conditions is necessary in designing craft for service in Indian waters, owing to the different nature of the rivers, and climatic conditions, as compared with those obtaining in non-tropical countries.

130. Shipbuilding firms in India claim that they are now capable of designing and building vessels, up to a certain limit of size, which are in every way satisfactory. The Director, Royal Indian Marine, our most qualified official witness, does not consider that the shipbuilding rules, as they stand, restrict private shipbuilding in India. He stated that he had never known of any department, or Local Government, requiring sea-going vessels of over 120 feet in length, and, therefore, that the rules applied only, in fact, to vessels for the Royal Indian Marine, and he had never suffered any inconvenience from them. In view, however, of the possibility of future development (which the Director recognised); of the fact that the rules do not apply exclusively to sea-going vessels; and of the desirability of throwing future requirements open to competition by private firms to a larger extent than hitherto, we think we are justified in proposing some modifications in the rules. The existing rules, which are reproduced as Appendix G, deal with two main subjects,—

Existing  
rules.

(i) procedure governing the provision of new vessels;

(ii) financial powers of Local Governments, etc., in regard to the construction and repair of vessels.

The rules under (i) principally aim at securing that, before any sea-going vessel above a certain size is ordered, the designs should embody the latest and most economical improvements introduced in shipbuilding in the United Kingdom. Those under (ii) practically make the Director, Royal Indian Marine, the arbiter whether engine-driven vessels, required by Local Governments and Administrations for inland navigation and for use at ports, shall be built elsewhere than in a government dockyard; and they provide that his advice, as regards the type and cost of the vessel, shall invariably be obtained and adopted on all material points.

131. We consider it important that, when a vessel of any considerable size is to be built, designs and specifications should be drawn up by a competent naval architect, so as to embody all the latest and most economical improvements as well as the special requirements of the department for which the vessel is to be built, and we think that in respect of such vessels the rules should still provide for the observance of this principle. If complete designs and specifications are not prepared beforehand, and tenderers are asked to submit their own, not only is much unnecessary work involved in the preparation of several sets, but it becomes exceedingly difficult to decide, with any certainty, which tender is the most advantageous. When, however, the designs and specifications have been prepared and accepted, it has been the almost invariable practice for the order for vessels of any considerable size to be placed in the United Kingdom, without giving shipbuilders in India an opportunity to quote. We consider that, for sea-going vessels up to 250 ft. in length, or to such greater length as firms in India may be able to build hereafter, opportunity should be afforded to local shipbuilders to tender in competition with firms in the United Kingdom, and that, if there is no material difference in favour of

Competition  
with  
British  
firms.



a British tender, an Indian tender should be accepted. We think also that it will be advisable for the Government of India to consider whether, in order to assist in the development of local shipbuilding, some orders for sea-going vessels should not be placed in India from time to time, without competition with British firms, provided that it can be shown that the price asked is not unreasonable. We are of the opinion that such encouragement of the industry, in its early stages, will conduce to its eventual prosperity, and enable local builders, later on, to compete on equal terms with the rest of the world.

Consulting  
Naval  
Architect.

132. Procedure in regard to the comparison of Indian with British tenders would be greatly simplified if the Consulting Naval Architect to the India Office were represented in this country by officers qualified to prepare designs and specifications of vessels which can be built in India, and to inspect them during construction. The resulting co-ordination of procedure and practice in regard to the designing and building of vessels in the two countries would be advantageous to Government, who would also derive considerable benefit from the fact that the Naval Architect, through his branch office, would gain particular experience of Indian conditions and the capabilities of shipbuilders in the country, and from the assistance and advice, which this branch would be able to afford, in regard to the development of the shipbuilding industry in India. The fact, that the Consulting Naval Architect to the India Office was represented in India, would also go some way to remove the apprehension, which seems to exist among firms in India, that, if tenders for the construction of a vessel are invited both in Great Britain and India, there is not much likelihood, under present conditions, of the Indian tender being recommended for acceptance. We, therefore, strongly advise that the Consulting Naval Architect to the India Office be approached with a view to establishing a branch of his office in India.

Director,  
Royal  
Indian  
Marine.

133. With regard to vessels required by Local Governments and Administrations, and covered by the prescriptions of part (ii) of the shipbuilding rules, it appears that, in the past, application has usually been made to private firms for a design, specification and estimate. When these have been submitted to the Director, Royal Indian Marine, that officer has decided, in practically every case, that the vessel should be built in one of the Royal Indian Marine Dockyards, thus depriving private enterprise from building a vessel, for which it had prepared designs and specifications, and which the purchasing department desired it should build. In Chapter V we have expressed the opinion that the building of all craft required by government departments should, subject to the prescriptions of the shipbuilding rules amended as we propose, be placed with private firms rather than with government dockyards. We are also of opinion that, for the reasons given below, it is not now necessary, or even advisable, that the Director, Royal Indian Marine, should be the sole authority in India for approving the designs of the vessels, and for advising the Government of India whether, or not, they should be built in a government dockyard.

134. Although there are no consulting naval architects at present available in India, except those retained on the designing staff of private firms, the Marine Departments of the provinces of Bengal, Bombay, Madras and Burma have each a qualified Marine Surveyor, stationed in Calcutta, Bombay, Madras and Rangoon respectively. These officers are practical men with a good knowledge of shipbuilding and marine engineering, and we suggest that they might be entrusted with the duty of advising on the designs and types of vessels required by local Governments, Administrations and departments, and also on ship repair work, which has to be undertaken within their respective provinces. The Marine Surveyors at the different Indian ports, who correspond to the Board of Trade Surveyors in the United Kingdom, are already responsible for passing plans and granting certificates as required by the shipping laws. We suggest that, as soon as increase of work warrants it, or until such time as the Consulting Naval Architect to the India Office establishes a branch in India, a special assistant in naval architecture should be attached to the office of the Marine Department in Calcutta, or other port, to assist in the extra work involved. We, therefore, recommend that the Director-General of Stores in India, local Governments and Administrations, and the Railway Board should be authorised to avail themselves of the services of the Marine Surveyors for such advice as they may require regarding the building or repairing of vessels in India, and that, when the plans and specifications have been approved by the Surveyors, the placing of orders in India for such vessels, or repairs, as are permitted by the rules should be allowed. This provision should not of course preclude the officers concerned from referring, as heretofore, to the Director, Royal Indian Marine, for advice and assistance should they wish to do so.

135. We assume that vessels will be constructed to conform with the classes laid down in accordance with the rules of one of the recognised British Registration Societies, *viz*, Lloyds or the British Corporation. These Societies have qualified surveyors at Indian ports, and their certificate of classification is, in itself, sufficient guarantee of the strength and quality of the materials used in the construction of vessels and their machinery. As the capabilities of shipbuilding firms in India vary greatly, it would be advisable for all shipbuilding yards to be examined by the Chief Government Marine Surveyor as to their equipment, capability of staff, and their capacity for turning out work. These inspections should be made at least every two years, so that up-to-date knowledge may be available. Lists, as follows, might be prepared and furnished to the Director General of Stores in India, local Governments and Administrations and the Railway Board for information :—

Register of  
firms.

- (i) Firms capable of designing and building all types of river craft and vessels for use in ports.
- (ii) Firms capable of designing and building sea-going crafts; the tonnage and size of ship that can be dealt with by each firm being recorded.

136. We recommend the following draft rules for adoption in place of those at present in force. We have not suggested a limit to the financial powers of local Governments and Administrations [in lieu of existing rule 7 (a)], as we assume that this will be covered by the delegation of powers proposed under the Reforms Scheme. Apart from this point, we consider that sections (ii) and (iii) of the existing rules should no longer be continued, as the matters covered by them will be sufficiently dealt with in our revised draft rules.

#### DRAFT SHIPBUILDING RULES.

The following procedure has been laid down in order to ensure that the designs of vessels should embody the latest and most economical improvements introduced in shipbuilding, and in order, at the same time, to encourage the development of the shipbuilding industry in India:

##### 1. *Rules relating to new sea-going vessels of 250 feet length and over.*

(a) When the Government of India, or a local Government or Administration, accepts the necessity for the purchase of a new vessel of this size, full particulars of the kind of vessel required, and of the service it is to fulfil, together with information regarding any special equipment or fittings needed, should be forwarded to the London Branch of the Indian Stores Department, through the Director, Royal Indian Marine, who will, if he thinks fit, prepare and send therewith a draft specification of the vessel. The head of the London Branch will consult the Naval Architect to the India Office (or to the Government of India in London), and will send to the Director, Royal Indian Marine, plans and full specifications of the proposed vessel with an estimate of its cost. After settling with the London Branch any points that may arise in respect thereof, the Director, Royal Indian Marine, will pass the plans and specifications and estimate to the officer, or department, concerned, and will, in the case of vessels required for the Royal Indian Marine, intimate whether the proposed vessel can be built in one of the government dockyards in India. Orders as to the construction of the vessel will then be issued by the Government of India, or the local Government or department concerned, after the necessary sanction to the expenditure has been accorded. These will either be acted upon by the Director, Royal Indian Marine, if the vessel is to be built at a government dockyard, or passed by him to the London Branch if the vessel is to be built in the United Kingdom.

b) When time is of importance the London Branch should be requested, on receipt of the particulars referred to in Rule 1 (a), to

furnish an estimate of the cost of the vessel to the Director, Royal Indian Marine, who, if he considers that the work cannot be undertaken in one of the government dockyards, may recommend the officer, or department, concerned to issue instructions for the building of the vessel as soon as the necessary sanction to the expenditure has been obtained, without waiting for the plans and full specification, which, in such a case, should be sent to the indenting department through the Director, Royal Indian Marine, as soon as may be practicable.

*2. Rules relating to new sea-going vessels from 180 feet to 250 feet in length.*

The procedure to be followed shall be the same as in the case of the larger vessels provided for under Rule 1 (a) and (b) above, but in this case tenders shall be invited from firms in India, who are on the approved list of ship-builders, capable of building vessels of the size required, as well as from firms in the United Kingdom.

*3. Rules relating to all power vessels under 180 feet in length whether for sea going or port work, and all vessels for inland water service and non-power vessels for sea or port work.*

- (a) Vessels which come within this category should, whenever possible, be designed and built in India.
- (b) When required for the Royal Indian Marine, the Director, Royal Indian Marine, should prepare designs and obtain tenders for a vessel of the description required from ship-builders in India, who are on the approved list; and, provided that the necessary sanction to the expenditure has been given, the order should be placed by the Director, Royal Indian Marine, and the construction should be carried out under his supervision. He should be at liberty to decide whether the vessel should be built in one of the government dockyards.
- (c) When required by any other department of Government, or by a local Government or Administration, particulars of the vessel should be sent to the Chief Marine Surveyor of the province in which it is required, and he should be requested to draw up such plans and specifications as he may consider necessary for the invitation of tenders. The department, or local Government or Administration concerned, will then invite tenders from firms on the approved list. These will be considered in consultation with the Chief Marine Surveyor, and, provided that the necessary sanction to the expenditure has been given, the order will be placed on the advice of that officer, and the construction should be carried out under his supervision.

## CHAPTER XI.

## PROPOSED ALTERATIONS IN STORES RULES.

Rules  
redrafted.

137. Our terms of reference require us to indicate the modifications of the Stores Rules which our scheme will necessitate. As these are considerable, we think that we can show them best by redrafting the rules, which we have accordingly recasted entirely in the form in which they are produced in paragraph 143 of this chapter. It will be observed that, in view of the altered conditions in which the rules will be applied, and in particular owing to the abandonment of arbitrary conditions regulating the purchase in India of imported stores, it has been possible considerably to simplify the rules as compared with their present form. We realise that the final shape to be assumed by these, or any other regulations, is largely determined by the criticisms to which they are subjected in the secretariat; we have therefore not gone into minor questions of detail, such as the exemption of the Burma Police in respect of articles of European manufacture, but submit the redraft as a concise expression of the practical effect of the policy envisaged by us in this report. It will be borne in mind that, while the rules would be applicable in their entirety to purchase by imperial departments and railways worked by the State, the extent of their application to local Governments must depend on the decisions reached on the questions discussed in Chapter VI. Before we proceed briefly to review their provisions, we may draw attention to certain general considerations which have influenced us in recasting the rules.

Defects of  
existing  
procedure.

138. The existing procedure is, we consider, defective in two respects: on the one hand, it entrusts the purchase of large quantities of stores to officers who are not expert purchasers, and who have very limited means of obtaining information in this respect; on the other, it makes no use of the technical knowledge which many officers possess, and which is essential to expert purchase of such stores as plant and machinery. This defect we contemplate remedying by concentrating in the expert purchasing branch of the Indian Stores Department all ordinary transactions at present carried out by non-experts, and by decentralising among expert officers such purchase as will benefit by the utilization of their technical knowledge. The only dealings then that will be left to non-experts are those of petty and urgent requirements within the limits of their financial powers, and even these we propose to curtail by confining them to supplementary demands. Bearing in mind the very large number of indenting officers who will patronize the Indian Stores Department, it is readily apparent that what may seem petty requirements, in the case of individual officers, may well, when co-ordinated from numerous sources, attain proportions that permit of bulk orders being placed with the attendant advantages of economy and improved quality.

Annual  
demands.

139. It may at first sight appear that this restriction on powers hitherto enjoyed constitutes a grievance, and may impose labour on the Indian Stores Department out

of proportion to the advantage to be secured. We have considered the point, and believe such an impression would be erroneous. The labour of obtaining a petty annual requirement comes under two heads, foreseeing the requirement, and procuring the stores. The former must fall on the indenting officer, and remains the same whether he arranges for its purchase or notifies the requirement to the Indian Stores Department. To notify is clearly less troublesome than to buy. The work involved in the office of the Indian Stores Department consists first of the clerical routine of co-ordinating the numerous demands, and secondly of arranging bulk purchase. We feel confident that our proposals make in the long run for reduced labour, as well as for economy and efficiency, and that indenting officers will soon realise this in practice even if at first they feel dubious of the result. We have in view the placing of large numbers of running contracts, and to this end we consider that all items, that can be, should be pooled. These running contracts will themselves become, in many instances, the source of supply of supplementary requirements, thus reducing the need for inexperienced purchase to meet petty and urgent demands. We however do not anticipate that the Indian Stores Department will itself make petty purchases, except as a last resource on appeal by an indenting officer. When the Indian Stores Department has completed its review of annual demands, each indenting officer would receive a list of his petty requirements which it had been decided not to merge in bulk orders, and he would then make his own arrangements.

140. Indenting officers may be grouped broadly in two classes, Railway and Army who stock in large quantities for retail issue to many dependent units; and Military and Public Works whose demands are for their own consumption. The annual indents of the former are checked and compiled in headquarters offices, where purchase is also arranged. Now that, under our proposals, purchase will be made by the Indian Stores Department, it becomes a question whether heads of departments will still require financial powers. It is clearly undesirable that they should exercise such powers in ordinary cases, because, if purchase is, as a rule, to be done by others, their ability for purchase becomes even smaller than it is at present. We have weighed this matter, and we have decided that financial authority must be given, although in practice we contemplate that it will rarely be exercised. Occasions will arise, especially in regard to the Army, when executive officers are faced with a situation necessitating the purchase of stores beyond their financial power, and, at the same time, complicated by doubt as to the action necessary. In these cases two references are required, one to the administrative head for orders, and one to the Indian Stores Department for provision of stores. India is so large, and its communications are so indifferent, that, in such a contingency, considerable time may elapse before both parties can act. We consider that these are occasions when the ability to exercise financial power may be of great assistance to an administrative officer, and we have framed our recommendations accordingly.

Financial  
powers of  
heads of  
departments.

The concentration of all power of purchase, during peace, in one central authority brings into existence an organisation, the need for which was very greatly felt during the Great War, both in the United Kingdom and in India; and this organisation, we contemplate, will expand to meet war requirements, rather than contract, owing to the exercise by the military authorities of their financial powers. At the same time, we feel that the need for such power may arise, and we have therefore suggested full powers for the heads of the large spending branches of the Army, in connection with naval and military operations.

Explanation  
of Rules  
proposed.

141. The following synopsis of the new rules, together with the accompanying explanations, will, we hope, make clear their intention. They comprise:—

*A preamble*, clearly defining the policy of Government, as an ever present reminder to officers of the primary necessity of the development of Indian industries.

*Rules I and II*, designed to indicate the scope of the rules, and reserving to the head of the Indian Stores Department the wider discretion which we consider should be vested in him by Government. We do not consider that this officer should be fettered by the rules, which have been laid down for the guidance of officers of what we may term unorganised purchasing departments. The principles, which will guide him in conducting the business of his department, are referred to elsewhere in our report, and would not appropriately be included in these rules.

*Rule III*, dealing with the purchase of articles of Indian production or local manufacture, is designed to give practical force to the principle that reasonable preference must be given to stores falling in this category. The principle is already expressed in the existing stores rules, but, for reasons detailed in Chapter VII, is not effective in practice. We anticipate that it can now be made effective owing to the establishment of a central agency equipped with competent officers for purchase, inspection and intelligence duties, and represented adequately throughout the country.

*Rule IV*, dealing with the purchase of such goods of foreign origin as must still be bought in the absence of Indian goods that can compete with them, aims at throwing open the various channels of supply for such goods, instead of maintaining the arbitrary distinctions in favour of one particular channel as hitherto. The rule thus carries into effect the policy indicated in Chapter VIII. In view of the incidental advantages in local transactions, this rule gives preference to this method of purchase, provided prices are not unfavourable, and quality is safeguarded.

*Rule V*, regarding the purchase, outside of India, of certain special kinds of stores, corresponds to existing Rule No. 7.

*Rule VI*, relating to interdepartmental purchases, reproduces existing Rule No. 6.

*Rule VII*, regulating comparison of price, contemplates, it will be observed, a more rigid comparison

between the London and the Indian quotations in the case of imported stores, than between quotations for goods of Indian production and similar imported goods. In the former case, the relative economy of the different channels of supply is obviously an important consideration in ordinary cases. But, when the question involved is whether an Indian or an imported article shall be bought to meet requirements, we consider that a more liberal discretion may properly be exercised, since it is the expressed policy of Government to give preference to the former; moreover there are many other factors, such as rapidity of supply, encouragement of industry, national insurance, affecting the comparison, which cannot be measured in terms of money. Take, for instance, the case of Army reserves. War reserves must always be of a size proportionate to the forecast, and their source of supply is immaterial and does not affect the amounts to be held; but this is not the case with peace reserves, which in most cases vary directly with their source of supply. This peace reserve is intended to obviate the inconvenience that would attend complete depletion of stock due to abnormal demands, errors in calculation, etc. For Home Supply stores the reserve is usually calculated at one half the average annual issue, and in the case of Ordnance, Factory, or Local Supply, the reserve is only one quarter of the average annual issue. There is thus an appreciable difference in the quantities of stores to be maintained as a peace reserve; in the storage accommodation required; in the capital locked up; and in the recurring charges for handling, preservation, etc. It is impracticable to calculate the extra cost to Government in this respect, consequent on whether an article is of Indian or Home Supply, but it is clear that such extra cost should be borne in mind when making a comparison between Indian and Home prices. This has not been done in the past, probably because it is impossible to express the advantages incidental to local supply, in terms of rupees, annas and pies. We have framed this rule on the assumption that the Director General of Stores in India, when issuing, for the guidance of indenting officers, price lists of articles imported through his agency, will quote the values at an Indian port, including all charges for interest, freight, insurance, landing and wharfage, and customs duty. Under the present rules, the onus of working out this complicated sum falls on indenting officers, whenever they consider local purchase of imported stores. We hold, however, that the Director General of Stores will be in a much better position to keep himself informed of the current rates of freight, insurance, etc., than individual officers. We would here remark that the practice of calculating only on the basis of the lowest freight paid by the India Office is unfair to the Indian manufacturer, and we consider that current commercial freights would be fairer. With the establishment of a freer competition, than at present exists, between different channels of supply, the question, whether it is possible to introduce a system of competitive simultaneous tendering between Indian and British firms, assumes special importance. It is a matter upon which opinions differ widely; we do not overlook the difficulties involved in the time taken in correspondence, and in intermediate fluctuations in



market prices and exchange, as well as in the chances of difference in the precise class of article tendered for, and in the conditions of contract. It is, however, generally recognised that it should be feasible to obtain simultaneous tenders so far, at least, as concerns large orders. For ordinary purchase, we recommend the adoption of the methods proposed by the Director General of Stores, India Office, that the Indian Stores Department should be furnished by the London Branch with copies of contracts placed in the United Kingdom. A study of these would enable the Director General of Stores, India, to form, in most cases, an opinion as to the trend of home prices sufficiently reliable to enable him to decide where to place his orders. In cases of doubt, or of particular importance, he would communicate specially with the London Branch with a view to ascertaining actual current quotations. We contemplate the exercise of considerable discretion by the Director General of Stores in determining the procedure to be adopted in particular cases, where comparison of prices is necessary.

*Rule VIII*, regarding inspection, corresponds to the existing Rule No. 11.

*Rule IX* prescribes the financial powers of various authorities to act within the Stores Rules; it is based on No. 13 of the Rules of 1913, but the limits have been generally raised in view of altered values and, in some cases, to meet special requirements.

*Appendix A*, referred to in draft *Rule V*, is the same as the existing Appendix A, which is connected with the corresponding present Rule No. 7.

*Appendix B*, of the existing rules has been omitted as it is no longer necessary to prescribe in this matter the firms to be dealt with, owing to the altered arrangements for placing orders, and for ensuring the quality of articles supplied.

Alternative proposals.

142 Our colleague, Lieutenant Colonel Hogg, differs from us in a point of administrative detail. He considers that indenting officers should be permitted to purchase their annual requirements, when such purchases are within the financial powers assigned to them. In doing so they should make full use, whenever possible, of any running contracts entered into by the Director General of Stores. An alternative set of rules with an explanatory note is given in paragraph 144.

#### 143. DRAFT RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE.

The Government of India are desirous of giving the utmost encouragement to every effort to substitute articles of indigenous origin, and of local manufacture, for articles now obtained from Europe and foreign countries, and desire that all officers of Government shall give preference to indigenous articles, provided the efficiency of the public service is not thereby impaired. The Government of India further consider that whenever stores of any description are procurable in the local market, of suitable quality and reasonable price, purchase should be made in India.

In accordance with this policy, and subject to any instructions regarding specific articles which have been, or may be, issued by the Government of India from time to time (e.g., those relating to the supply of stationery), the following are the rules relating to the supply of articles required for the public service. These rules supersede all previous orders which are not explicitly continued.

*Rule I.—Classification of stores.*

The Director General of Stores, India, will specify the different classes of stores which must be obtained by indent on the Indian Stores Department only; and those which should be obtained by purchasing departments direct from local sources of supply, or by direct indent on the London Branch.

*Rule II.—Applicability of Rules.*

These rules have been framed for the guidance of officers of Government purchasing stores in India within the financial limits prescribed under *Rule IX*, but these financial powers shall not be exercised in the case of annual requirements. For annual requirements which are not urgent, the demands (other than such as are obtained direct by the purchasing department from local sources of supply, or are transmitted direct to the London Branch, in accordance with the classification of stores issued by the Director General of Stores) will be submitted to the Director General of Stores with the object of enabling him to secure economy by co-ordinating demands and obtaining the benefits of bulk orders.

Nothing in these rules shall be deemed to apply to purchases made by the Director General of Stores in India, who, subject only to the control of the Government of India, shall have complete freedom in the matter of purchase.

*Rule III.—Articles produced in India.*

- (a) *Articles manufactured in India from Indian materials.*—All articles which are produced in India in the form of raw material, or are manufactured in India from materials produced in the country, must be purchased in India, provided the quality is sufficiently good for the purpose, and the price reasonable.
- (b) *Articles manufactured in India wholly or partially from imported materials.*—All articles manufactured (and not merely assembled) in India, either wholly or partially from imported raw materials or component parts such as are not at the time of the order being produced or manufactured in India, must be purchased in India, provided that the quality is sufficiently good for the purpose, and the price reasonable.

*Rule IV.—Articles which are not manufactured in India.*

- (a) *Plant and machinery and components thereof.*—Plant and machinery which is not manufactured in India, and component parts for repairs and

renewals thereof, may be purchased in India from branches, or duly accredited agents, of British manufacturing firms established in India and approved by the Director General of Stores in India, subject to the financial limits prescribed in *Rule IX*, and to the following conditions :—

- (i) that the quality is suitable, and the price is not unfavourable ;
- (ii) that branch firms shall be able not only to supply plant and machinery, but shall also be able to tender for the installation and guaranteed satisfactory working of the same ;
- (iii) that an accredited agent shall be one who is already engaged in India in the manufacture and repair of plant and machinery, employs Indian workmen, and is able to tender not only for the supply of plant and machinery, but also for its installation and guaranteed satisfactory working.

Requirements, which are in excess of the financial powers of the officer concerned, shall be purchased :—

- (i) by direct indent on the London Branch, if the stores are of a class for which this procedure is prescribed by the Director General of Stores ;
  - (v) by indent on the Director General of Stores in other cases.
- (b) *Other articles*.—All other articles, which are not manufactured in India, shall be obtained :—
- (i) by direct indent on the London Branch, if they are stores of a class for which this procedure is prescribed by the Director General of Stores ;
  - (ii) by local purchase, if the cost of supply does not exceed the financial limit imposed on the indenting officer under *Rule IX*, and provided quality is suitable and the price is not unfavourable. In case of emergency, when inconvenience would be caused by waiting to obtain the stores through another agency, the comparison of price may be waived ;
  - (iii) by indent on the Director General of Stores, India, in cases not covered by (i) or (ii).

**NOTE 1.**—In the case of construction works let out on contract, articles required for the construction of such works may be supplied by the contracting firms, subject to the condition that the materials conform to the current specifications prescribed by the Director General of Stores.

**NOTE 2.**—Officers shall, at all times, have the right of indenting on the Director General of Stores, whenever they consider it necessary to do so in the interest of the public service.

*Rule V.—Stores which may be purchased outside India.*

Subject to the conditions of *Rules I* and *VIII*, the following articles may be purchased direct outside India, payment being made direct to the suppliers by the purchasing officers:—

- (i) seeds and cinchona bark;
- (ii) articles for experimental, or research, purposes by officers approved by the Government of India. A list of officers so approved is given in Appendix A;
- (iii) excise instruments and apparatus required by Provincial Excise Departments for experimental, and research, purposes;
- (iv) China, glass, cutlery, plant, crockery, and perishable fabrics, including linen, for residences furnished by Government;
- (v) timber;
- (vi) Australian lead;
- (vii) articles required for the preparation of vaccine lymph;
- (viii) chemicals and scientific apparatus required for use in government schools and colleges.

*Rule VI.—Inter-departmental purchases.*

Nothing in these rules shall prohibit the purchase of stores, of whatever origin, by one department, or railway, from another.

*Rule VII.—Method of comparing prices.*

In comparing the cost of imported articles, purchased locally, with that of similar articles imported through the agency of the Director General of Stores in India, reference should be made to the price lists issued by that officer from time to time. These lists, which show the market value of articles at an Indian port, are based on the current price ruling in England, or country of origin, to which is added:—

- (a) interest, insurance, freight, brokerage;
- (b) landing, wharfage, and port charges;
- (c) also the customs duty shown in the tariff as applicable to the article in question, calculated on its cost *plus* the additional charges as in (a) above.

It will be for the indenting officer to take into account the cost of carriage to destination from port of entry, or place of supply in India, as the case may be.

In the case of important contracts, specific reference should be made to the Director General of Stores in India.

NOTE.—As regards the determination, for the purpose of *Rule III*, of the 'reasonableness', or otherwise, of the price quotations for stores of local origin, it is not intended that the comparison with the cost of similar imported stores should be so precise as that indicated in this rule, though the method of comparison will be the same. A reasonable discretion must be exercised, with due regard to the manifold advantages of utilizing local manufactures.

*Rule VIII.—Inspection.*

All articles purchased in India are liable to the specifications laid down from time to time by the Director General of Stores in India, and to undergo such inspection and test, either in India or in England, as he may consider necessary.

*Rule IX.—Financial limits on powers of officers to make purchases in India.*

In the case of purchases made under *Rule III*, an officer's powers of purchase extend to the ordinary limits to which he is empowered to enter into contracts; but, in the case of purchases made in India under *Rule IV*, the limits for expenditure on any one article, or on any number of similar articles purchased at one time, are as follows :—

	Powers of purchase under <i>Rule</i> .	
	<i>IV (a)</i>	<i>IV (b)</i>
<i>(a) Civil Departments—</i>	Rs.	Rs.
(i) Heads of Departments, Commissioners of Divisions; other officers of, or above, the rank of Collector, whom the local Government may select; and Principals of Colleges and Inspectors of Schools in Bengal, Bihar and Orissa and Assam.	Nil.	500
(ii) Other officers authorised to incur expenditure ... ..	Nil.	100
(iii) Surveyor General of India; Director General Posts and Telegraphs. ..	50,000	10,000
(iv) Controller of Printing, Stationery and Stamps. ... ..	50,000	Full powers
(v) Local Government or Administration ...	Full powers	Full powers
The powers of a Local Government are also exercised by the following officers :—		
Agricultural Advisor to the Government of India; Director of the Agricultural Research Institute, Pusa; Director General of Observatories; Political Resident, Persian Gulf; Superintendent of Port Blair.		
<i>(b) Public Works Department—</i>		
(i) Executive or Assistant Engineer holding charge of a Division ... ..	5,000	1,000
(ii) Superintending Engineer or Superintendent of Works ... ..	25,000	5,000
(iii) Local Government or Administration.	Full powers	Full powers
<i>(c) Railway Department—</i>		
(i) Controller of Stores ... ..	Nil.	1,000
(ii) Executive or Assistant Engineer holding charge of a Division on a line under construction or survey ... ..	5,000	1,000
(iii) Engineer-in-Chief holding charge of a line under construction ... ..	50,000	5,000
(iv) Agent of an open line ... ..	50,000	10,000
(v) Railway Board ... ..	Full powers	Full powers

	Powers of purchase under <i>Rule</i> .	
	<i>IV (a)</i>	<i>IV (b)</i>
(d) <i>Army Department.</i> —	Rs.	Rs.
(i) Director General of Military Works ; Director General of Ordnance ; Director, Royal Indian Marine ...	Full powers	10,000*
Quartermaster General in India ...	Full powers (for Mechanical Transport Stores only).	10,000*
(ii) Divisional Commander ...	10,000	10,000
(iii) Director General, Indian Medical Service ...	Nil.	5,000
Directors of Quartermaster General's Branch.	5,000 (for Mechanical Transport Stores only).	5,000
(iv) Officer Commanding, Brigade ; Director of Ordnance Factories ; Deputy Director, Royal Indian Marine ...	5,000	5,000
(v) Supply and Transport Officer on special duty in Kashmir ...	Nil.	1,000
(vi) Chief of the General Staff ; General Officer Commanding, Northern and Southern Armies ; Adjutant General in India ; Director, Medical Services, Military ...	Nil.	500
(vii) Officer Commanding a station ; Superintendent, Army Remount Department ; Government Inspector of Army Boot Factory, Cawnpore ; Chief Ordnance Officer ; Inspectors (Ordnance Department) ; the Assistant Inspector in charge of General Stores and Proof and Experimental Officer, Balasore ; Medical Storekeeper ; Commandant, Indian Staff College ; Assistant Director of Supplies ; Assistant Director of Transport ; Superintendent, Army Clothing Factory ...	Nil.	500
(viii) (a) ; Superintendent, Ordnance Factories ; Controller of Grass Farms ...	2,500	500
(viii) Officer Commanding a unit (including a hospital) ; Senior Medical Officer, Indian Medical Service, of a station ; Recruiting Officer for Gorkhas at Gorakhpur ; Officers (Ordnance or Departmental) in charge of Depots ; Assistant Inspectors (Ordnance Department) with the exception of the Assistant Inspector in charge of General Stores ; Officer in charge of Supply Reserve Depots ; Commissioned officers Commanding Depot Transport Lines ; Officer in charge of Supplies ; Chief Chemical Examiner ...	Nil.	50

\* These officers have full powers of purchase under *Rule IV(b)* when the purchases are required to meet the necessities of naval and military operations.

## APPENDIX A.

List of Officers referred to in *Rule V*, who are authorised to obtain direct from manufacturers or dealers in England, America, Japan, or other foreign countries such articles as they may require for experimental or research purposes.

Superintendent, X-ray Institute.  
 Chemical Examiners.  
 Superintendents of Vaccine Depots.  
 Principals of Medical Colleges.  
 Superintendents of Medical Schools.  
 Directors of Bacteriological, Pathological or Research Laboratories, including officers in charge of Divisional and Brigade Laboratories.  
 Principals of Arts Colleges.  
 Principals of Technical and Industrial Institutes.  
 Directors of Industries.  
 Directors of Fisheries.  
 Sanitary Commissioners.  
 Director, Madras Cinchona Department.  
 Principals of Training Colleges.  
 Principals of Veterinary Colleges.  
 Officer in charge of the Experimental Sewage Installation at Poona.  
 Surveyor General of India.  
 Inspector General of Forests.  
 Director General of Observatories.  
 Director of Botanical Survey.  
 Agricultural Adviser to the Government of India and Director, Agricultural Research Institute, Pusa.  
 Imperial Bacteriologist, Civil Veterinary Department.  
 Imperial Agricultural Chemist.  
 Imperial Mycologist.  
 Imperial Entomologist.  
 Directors of Agriculture.  
 President of the Imperial Forest Research Institute.  
 Principal of the Imperial Forest College.  
 Director, Geological Survey of India.  
 Railway Board.  
 Directors of Public Instruction.  
 Chief Malaria Medical Officer, Punjab.  
 Chief Conservator of Forests, Burma.  
 Director of Zoological Survey of India.  
 Inspector of Science and European Schools, Central Provinces.  
 Metallurgical Inspector, Jamshedpur.  
 Conservator of Research and Working Plans, Burma.  
 Superintendent, Government Acetone Factory, Nasik.  
 Superintendent, Local Manufactures and Government Test House, Alipore.  
 Conservator of Forests, Western Circle, Punjab.  
 Commissioner, Northern India Salt Revenue.

144. The draft rules below are proposed by Lieutenant Colonel Hogg as being less complex and simpler to apply in practice than those agreed to by the majority. The principal points in which the rules recommended by the majority differ from those below are :—

- (i) prescription by the Director General of Stores of the source of supply of various classes of articles ;
- (ii) distinction between articles wholly manufactured from indigenous material and those manufactured partly from imported material ;
- (iii) that officers shall not exercise financial powers in respect of annual requirements and that all demands of this nature must be preferred on the Stores Department.

In his opinion these changes tend towards unnecessary detail, to fetter the discretion of local officers, and to burden the Indian Stores Department with petty indents, and he considers that, though they may prove acceptable to departments like the Ordnance, who procure stores for the purpose of issue to others, the rules which follow will be perhaps found more generally suitable to the engineering services, *viz.*, Railway, Military and Public Works.

#### ALTERNATIVE RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE (REFERRED TO IN PARAGRAPH 142).

The Government of India are desirous of giving the utmost encouragement to every effort to substitute, for articles now obtained from Europe and foreign countries, articles of indigenous origin and of local manufacture. The Governor General in Council desires that all offices of Government shall give preference to the Indian article, provided that the efficiency of the public service is not thereby impaired. The Government of India direct that, whenever stores of any sort are procurable in the local market, of suitable quality and reasonable price, purchase shall be made in India.

In accordance with this policy and subject to the provisions of the general rules specified below, and to any instructions regarding specific articles which have been, or may be, issued by the Government of India from time to time (*e.g.*, those relating to the supply of stationery), the following are the rules relating to the supply of articles required for the public service. These rules supersede all previous orders which are not explicitly continued.

#### *Rule I.—Articles produced or manufactured in India.*

All articles which are produced in India in the form of raw material, or are manufactured in India,



either from materials produced in India, or from imported material, must be purchased locally provided that the quality is sufficiently good for the purpose, and the price reasonable, subject to the condition that a substantial part of the process of manufacture has been performed in India.

NOTE.—The term “a substantial part of the process of manufacture” means that a substantial part of the preparation of the finished article must be performed in India, whether from raw materials or from component parts obtained in a finished state from other sources.

*Rule II.—Plant and Machinery.*

Plant and machinery, and component parts for repairs and renewals of such plant and machinery, may be purchased in India by duly qualified officers from branches, or duly accredited agents, of British manufacturing firms established in India, and approved by the Director General of Stores in India, subject to the following conditions:—

- (i) that the plant and machinery are of the type ordinarily manufactured by the firm ;
- (ii) that the branch, or agent, entertains a staff of expert mechanics capable, when so required, of erecting and repairing the plant and machinery in question ;
- (iii) that the price is reasonable ;
- (iv) that the cost of supply under any one order, or in respect of any one type of plant or machinery, does not exceed Rs. 25,000.

NOTE.—It must be clearly understood that this rule is subject to the preference which is to be given under *Rule I* to articles of Indian manufacture.

*Rule III.—Stores which may be purchased outside India.*

The following articles may be purchased direct outside India, payment being made direct to the suppliers by the purchasing officers:—

- (i) seeds and cinchona bark ;
- (ii) articles for experimental or research purposes by officers approved by the Government of India. A list of officers so approved is given in Appendix A\* ;
- (iii) excise instruments and apparatus required by Provincial Excise Departments for experimental or research purposes ;
- (iv) China, glass, cutlery, plant, crockery, and perishable fabrics, including linen, for residences furnished by Government ;
- (v) timber

- (vi) Australian lead;
- (vii) articles required for the preparation of vaccine lymph;
- (viii) chemicals and scientific apparatus required for use in government schools and colleges;
- (ix) articles for Viceregal residences and for the residences of provincial Governors.

*Rule IV.—Articles which are not manufactured in India.*

Subject to the provisions of *Rules II and III*, all other articles not manufactured in India shall be obtained by indent upon the Director General of Stores in India, except in the following cases :—

- (a) when the cost of supply does not exceed the financial limits imposed on indenting officers under *Rule IX*;
- (b) in the case of construction works let out on contract, articles required for the construction of such works may be supplied by the contracting firms subject to the condition that the materials conform to the current specifications prescribed by the Director General of Stores.

Provided that officers shall have the right of indenting on the Director General of Stores when they consider it necessary.

NOTE.—Indents should not ordinarily be submitted to the Director General of Stores when the value of the stores demanded is less than Rs. 1,000.

*Rule V.—Inter-departmental purchases.*

Nothing in these rules shall prohibit the purchase of stores, of whatever origin, by one department, or railway, from another.

GENERAL RULES.

*Rule VI.—Method of comparing prices.*

In comparing the cost of articles purchased locally with that of similar articles imported through the agency of the Director General of Stores in India, reference shall be made to the price lists issued by that officer from time to time. These lists, which show the market value of articles at an Indian port, are based on the current price ruling in England, or country of origin, to which is added :—

- (a) interest, insurance, freight, brokerage;
- (b) landing, wharfage and port charges;
- (c) the customs duty shown in the tariff as applicable to the article in question calculated on its cost *plus* the additional charges as in (a) above.

It will be for the indenting officer to take into account the cost of carriage to destination from port of entry, or place of supply in India, as the case may be.

In the case of important contracts specific reference may be made to the Director General of Stores in India.

*Rule VII.—Tests.*

Any articles purchased in India which require to be tested are liable to the specifications laid down from time to time by the Director General of Stores in India, and may be required to pass the tests prescribed for such articles.

*Rule VIII.—Applicability of rules.*

These rules have been framed for the guidance of officers of Government purchasing stores in India within the financial limits prescribed under *Rule IX*. The Director General of Stores in India, however, under the orders of the Government of India, shall have complete freedom in the matter of purchase.

*Rule IX.—Financial limits on powers of officers to make purchases in India.*

In the case of purchases made under *Rule I*, an officer's power of purchase extends to the ordinary limits to which he is empowered to enter into contracts.

In respect of all other ordinary purchases, the powers of local Governments or Administrations, the Army Department, and the Railway Board, are limited to an expenditure of Rs. 50,000 on any one article, or on any number of similar articles purchased at one time; provided that full powers may be exercised in cases of emergency, a report of the transaction being made at the same time to the Director General of Stores in India.

Financial limits on the powers of subordinate officers shall be laid down by local Governments or Administrations, Army Department, and Railway Board.

The powers of a local Government are also exercised by the following officers:—

- (1) Surveyor General of India;
- (2) Agricultural Adviser to the Government of India;
- (3) Director of the Agricultural Research Institute, Pusa;
- (4) Director General of Observatories;
- (5) Director General, Posts and Telegraphs;
- (6) Director General, Military Works Services;
- (7) Political Resident, Persian Gulf;
- (8) Controller, Printing, Stationery and Stamps.

*Rule X.—Power to sanction departures from these rules.*

The Government of India have power to sanction departures from these rules in cases where such departure is absolutely necessary.

## CHAPTER XII.

THE PROPOSED INDIAN STORES DEPARTMENT; ITS  
FUNCTIONS AND ORGANISATION.

145. In the preceding chapters, an attempt has been made to set out the problem before us, and the various considerations which must be kept in view in devising a solution. We have discussed the question of stores policy, and indicated the alterations which we consider should be made in the Stores Rules, in which that policy is laid down. We now have to give shape to the opinions we have formed as to the nature of the organization which it is necessary to establish in India, with a comprehensive indication of the work for which it must provide and the staff to be employed. Our recommendations will be most readily understood if we treat the matter first in a summary form, and proceed later to the more detailed discussion of the organization initially proposed, and its subsequent development. This chapter will therefore be divided into the following sections:—

Introductory.

- A—Summary of work to be done.
- B—Outline of organisation.
- C—Headquarters, provincial agents, inspection depots, liaison officers.
- D—Absorption of existing organisations.
- E—Details of organisation—Initial stage.
- F—Development of organisation—Ultimate stage.

*A—Summary of work to be done.*

146. From the particulars given in Chapter II, paragraph 10, it will be seen that the Indian Stores Department will not be concerned with food and fodder for the Army, nor with such ordinary classes of indigenous materials and stores as are generally obtainable anywhere in India, and which are never imported from abroad. Apart from these, there are certain wide categories of stores in use by various departments which we must consider. It has been brought prominently to our notice that the departments using such stores fall into two distinct classes; those so equipped with expert officers, and with organised purchasing systems of their own, that they can be trusted to act for themselves, at least in regard to certain classes of the stores they require. These departments can still be helped materially, if relieved of responsibility for the purchase of other descriptions of stores requiring peculiar knowledge, and given the assistance of an organised inspection staff, the need of which is very generally felt; provided there is available for their use reliable intelligence regarding sources of supply and prices. The other class of department is that in which the stores are purchased by, and for the use of, officers who do not usually claim any technical knowledge of stores; for these it is desirable to furnish a wider measure of assistance, and to purchase not only the special kinds of goods alluded to above, but also their miscellaneous requirements. For all departments we have to provide a machinery

Two main  
groups of  
departments.

to carry into effect the changed-policy of stores purchase and inspection, which has formed the subject of the preceding chapters of this report.

Functions.

147. We are thus led to propose that the Indian Stores Department :—

(a) Should act on behalf of all imperial departments of the Government of India (including the Army, Marine and Civil Departments and State-worked railways); and for such provincial Governments, company worked railways, corporations, port trusts, municipalities and similar *quasi*-public bodies, and such Indian Native States, as may desire to avail themselves of the department's assistance.

(b) Should so conduct its operations as to prevent the purchase of imported goods so long as goods of indigenous production, of suitable quality and price, can be procured instead, thus making effective the prescriptions of the stores rules.

(c) Should purchase and inspect in India :—

- |   |  |
|---|--|
| (i) oils, paints and chemicals, and<br>miscellaneous stores of an allied<br>nature ;  | } For all<br>authori-<br>ties.   |
| (ii) leather goods and miscellaneous<br>stores of an allied nature ;  |  |
| (iii) textile goods and miscellaneous<br>stores of an allied nature ;   |  |
| (iv) timber, including railway sleep-<br>ers ;  |  |
| (v) all engineering manu-<br>factures, including<br>plant and machin-<br>ery; and miscel-<br>laneous hardware<br>stores of an allied<br>nature. | } For all authorities<br>except the Marine,<br>Railways, Ordnance<br>Factories, Military and Pub-<br>lic Works, and<br>Telegraph Depart-<br>ments. |

(d) Should inspect stores of the above categories, which may still be purchased direct by officers of the various government departments.

(e) Should absorb, as a branch, the existing organisation of the Director General of Stores, India Office, and should utilise this branch to purchase, in the United Kingdom, goods which, under the operations of (b) and (c) above, are not purchased in India.

(f) Should act as a central bureau of information on all matters affecting the purchase of stores, and their price, particularly with reference to the extent of Indian manufacturers and their capacity for production from time to time.

In indicating this wide range of duties, and in detailing hereafter the size of the necessary organisation, we desire to lay particular emphasis on the point that the organisation must always be thoroughly efficient. We do not advise, therefore, that the whole of the duties indicated should be undertaken at the outset, but that the full measure of activity should be attained by progressive steps.

148. We consider that the Indian Stores Department should be the sole authority in India for the provision of all government stores, but we contemplate that it will not exercise its complete executive functions in respect to two categories of stores. The first comprises coal and stationery, for the provision of which organisations exist at present which are suitable and self-contained. No advantage will be gained, while clerical labour must be increased, if the work at present done by these organisations is transferred to the Indian Stores Department; this arrangement we regard as permanent in respect of coal. In the case of these organisations, however, the Director General of Stores would have full authority to scrutinise their Home indents with a view to ensure attention to the encouragement of Indian industries.

Authority  
paramount  
in stores  
matters.

149. The second category comprises certain medical stores, and technical stores of the Royal Air Force. As regards medical stores, in the absence of a Drugs Act in India, we feel that it would be injudicious to transfer an experienced well-equipped purchasing agency from the direction of the Director General, Indian Medical Service, to the administration of the Indian Stores Department, although we contemplate that eventually, when conditions are more suitable, the provision of medical stores might well come within the scope of the department. Technical stores of the Royal Air Force are similarly situated; for the time being they are in a class by themselves, and should be specially catered for by the existing experienced staff; but as civil aviation grows, and industries connected therewith are established in India, provision of these stores would also pass to the Indian Stores Department. We consider that demands for mechanical transport should at once pass through the Indian Stores Department. The use of motor vehicles for commercial purposes is rapidly growing in India, and all departments demand these in greater, or less, numbers. The Indian Stores Department should therefore undertake responsibility for provision in this respect from the beginning.

Medical,  
aviation, and  
mechanical  
transport  
stores.

150. In respect of printing, stationery and stamps, we were faced with a peculiar difficulty. The Controller exercises three distinct functions, *viz.*, control of printing, purchase of stationery, and distribution of stationery; we are only concerned with the second of these functions, and we have found that the latter two are very closely connected. We have decided, therefore, not to recommend the absorption of this organisation into that of the Stores Department for the present, although, should printing be divorced from stationery, the latter could be taken over. We realise that the volume of stationery supplies is steadily increasing, and we note that the percentage of stores procured by this

Stationery  
and stamps.

department from England is diminishing. While, therefore, the Controller of Printing, Stationery and Stamps will submit his indents for English stores to the Indian Stores Department, we propose that he should be given full discretion in the matter of local purchase, and for this reason we have recommended in our new Stores Rules (Chapter XI) that he should exercise extensive powers.

*B—Outline of organisation.*

**Organisation.**

151. To carry out the duties indicated above we consider it necessary to set up :—

*A headquarters office* which shall comprise four principal sections, namely :—

Purchase Branch ;

Intelligence Branch ;

General Branch, including the superior direction, accounts and miscellaneous correspondence ;

Inspection Branch.

*Provincial agencies* at the principal provincial headquarters and trade centres :—

- (i) to receive local demands and dispose of them either by local purchase, or by passing to the headquarters office ;
- (ii) to act as representatives of the head office ; to collect in collaboration with the provincial Directors of Industries, intelligence regarding the productive capacity of provinces ; to disseminate locally similar information regarding other provinces, and, so far as available, information regarding prices prevailing in India and in the United Kingdom ; and, in special cases, to make local purchases on behalf of headquarters ;
- (iii) to have administrative charge of such inspection depots and pattern rooms as may be established at provincial headquarters.

The provincial agents will be in personal touch with the local officers of consuming departments, for instance in Calcutta with the neighbouring officers of the Ordnance Factory staff, and they should be in a position to afford them material assistance and advice in making purchases.

*An inspection staff*, subordinate to the headquarters inspection organisation, moveable in accordance with the demands for their services from time to time, their headquarters being usually at inspection depots.

*The London Branch* being the existing organisation of the Director General of Stores; India Office, when it becomes a branch of the Indian Stores Department.

*C—Headquarters, Provincial Agents, Inspection  
Depots, Liaison Officers.*

152. The Committee are almost equally divided in opinion on the question of the location of the headquarters of the Indian Stores Department. Various alternatives have been discussed, but it appears that the final choice may be limited to one of three situations, namely:—

Alternatives.

- (i) with the headquarters of the Government of India;
- (ii) at one of the chief ports, naturally either Calcutta or Bombay.
- (iii) at an important up-country commercial centre, in which case Cawnpore suggests itself.

153. The Committee are in general agreement in rejecting the first alternative. There certainly would be some administrative convenience in having the Director General, with his office, in close proximity to the department of Government to which he will be subordinate and to at least one—the Army Department—with the officers of which a considerable part of his work will lie. But so complete a removal, not alone of the head of a commercial department, but also of his principal officers, from a commercial atmosphere, would be a serious objection; while the great congestion already apparent, at least in Simla, renders it most undesirable to propose a further increase in the number of offices there. The objections, taken by some of us to the Director General of Stores being located at Cawnpore, would apply still more forcibly in the case of Simla, or Delhi. We contemplate that, in any event, the Director General of Stores will tour extensively, and that he will be able to visit the headquarters of the Government of India whenever occasion arises for personal discussions. The objections to either Simla, or Delhi, as the headquarters station thus appear to us greatly to outweigh the advantages, and we think that one of the other alternatives must be chosen.

With the  
Government  
of India.

154. It is clear that the choice of a port must lie between Bombay and Calcutta. Our colleague, Mr. Lalji Naranji, in the event of the rejection of the proposal to locate the headquarters at those of the Government of India, which he would prefer, is strongly in favour of Bombay. He observes that, if a trade centre is preferred, Bombay would be the most suitable, as it is the home of Indian commerce, and its atmosphere, as one European witness has pointed out, is more liberal than that of Calcutta. Our colleague contends that geographically, too, Bombay is the most desirable centre, being the largest Indian maritime port, and also the main gateway of Indian trade and commerce. The majority of the Committee, however, consider that Calcutta has the advantage, and incline to the opinion that it is the proper place for the Director General of Stores to be stationed, as contemplated also by the Indian Industrial Commission (*vide* paragraph 197 of their report). In favour of this view, the majority lay

Calcutta or  
Bombay.



stress on the pre-eminence of Calcutta as a centre of commerce and industry, and its proximity to the localities in which some of the principal industries of the country exist, and are being developed. They are impressed by the importance attached to close touch between the staff and representatives of industrial enterprise, and consider that this will have a real influence in reducing the tendency of officials to the creation of too bureaucratic an atmosphere. Calcutta, too, will be able to offer a more tangible advantage, in that the assistance of the members of the inspection staff, skilled in a wide variety of manufactures, who must in any case be employed locally, will be available to assist the headquarters staff in dealing with technicalities in contracts and specifications. Without such expert assistance, it would frequently be difficult for the headquarters administrative staff to draw up specifications. The administrative staff will also have the advantage of being in close touch with the most important of the provincial agencies, and with the Test House staff at Alipore. On the other hand, there is a clear objection to the headquarters being located in Calcutta on the score of congestion and greater expense; this has not been overlooked. It is considered that this disadvantage can be minimised by choosing a suitable locality for the office; but, in any case, it does not appeal to the members of the Committee, who favour this alternative, as being sufficiently important to outweigh the advantages.

Cawnpore.

155. Some members of the Committee, however, are more strongly impressed by the arguments in favour of locating the headquarters of the Indian Stores Department at a conveniently central up-country station, preferably one which also is an important business centre: it is this last consideration which has finally determined their choice of Cawnpore rather than Delhi. They consider that the advantages of freedom from local prejudice in favour of trade interests at either of the larger ports is important, and that, in so far as business 'atmosphere' may be desirable, it can be sufficiently secured in Cawnpore, which is a rapidly growing industrial centre. Cawnpore also has the decided attraction of being a cheaper place, in which to live and to carry on business, than Calcutta. Those of the Committee, who favour the second alternative, recognise the force in these arguments, but lay particular stress on the availability in Calcutta of a wider variety of inspection experts than in Cawnpore, where the manufactures, though important, are less diverse and call for a smaller inspection staff with less extensive qualifications.

Majority  
favour  
Calcutta.

156. To sum up then, the Committee by a majority favour the location of the Director General of Stores, and his headquarters staff, at Calcutta; but some of the members think Cawnpore preferable.

Provincial  
Agents.

157. It is evident from the indication already given of the work to be done, that the Indian Stores Department must be adequately represented by agents at the principal provincial headquarters, and at trade centres. It will be remembered that the Indian Industrial Com-

mission, who, however, did not examine the matter in detail, inclined (*vide* paragraphs 196-197 of their report) to the opinion that, for such services as they anticipated a Central Stores Department would require in the provinces, use should be made of the personnel of the several provincial Directorates of Industries. This is a question which we have had the advantage of discussing fully at a recent conference of the several Directors, and representatives of local Governments, with the Board of Industries and Munitions. The conclusion arrived at was that it would be impracticable for the Directors of Industries themselves, or their staff, to act as local representatives of the Stores Department, and that special local agents should be appointed. These would be subordinate to the Director General of Stores, but we are assured that they could rely on receiving the fullest measure of assistance and co-operation from the Directors of Industries. This is essential, and will be of mutual advantage, as the Indian Stores Department will be the agency for introducing provincial products, when of suitable quality and price, to government departments, as well as for supplying provincial Governments with any requirements they wish to obtain through it; while the Indian Stores Department must always look to the Directors of Industries for advice, as to local sources of supply and for co-operation in facilitating their utilisation and development. We anticipate that the provincial agents will be in such intimate touch with the Directors of Industries, and other officials of the local Governments, that they will be in a most favourable position to give effect to the wishes of the provincial authorities as to the steps to be taken in dealing with their demands. At the outset, we consider that provincial agents will be necessary at Calcutta, Bombay, Madras, Rangoon, Cawnpore and Lahore; at Karachi probably a branch of the Lahore agency would suffice.

158. Reference is invited to the observations made in Chapter IX regarding the extent to which inspection of stores is necessary; the provision of inspection depots; and assistance to be obtained from liaison officers in dealing with Army requirements.

Inspection  
Depots.

#### *D—Absorption of existing organisations.*

159. There are already in existence two organisations which it will be convenient to incorporate in the Indian Stores Department, because the work they are doing will, in future, form part of the duties to be undertaken by it. These are the organisations of the Metallurgical Inspector at Jamshedpur, and of the Superintendent of Local Manufactures and Test House at Calcutta. The Metallurgical Inspector is responsible for the examination and passing of all products of the Tata Iron and Steel Works bought for government use, and the services of his staff are also at the disposal of railway companies and other public and private bodies, who wish to take advantage of them, on payment of certain fees. With the extension of existing iron and steel works and the establishment of new undertakings now in progress it seems probable that the Inspector's establishment will need expansion. The Superintendent of Local Manufactures at Calcutta controls the Test House at Alipore which is equipped for the chemical

Metallurgical  
Inspector and  
Superintendent  
of Local  
Manufactures.

and physical tests of practically all classes of stores and materials. He is also the head of the inspection of local manufactures which includes the examination, during manufacture by local firms, of structural and engineering stores for railways and other government departments. The Test House at Alipore is an important institution and affords at least the nucleus for an organisation with the same objects but with the enlarged sphere of operations which will be necessary under our other proposals.

Mining  
Engineer  
and Con-  
troller of  
Stationery.

160. We do not recommend the absorption in the Indian Stores Department of the existing organisations of the Mining Engineer to the Railway Board, nor, for the present, of the Controller of Printing, Stationery and Stamps; as, though their functions are similar to those of the new department, their spheres are well defined and self-contained. We consider, however, that there is much force in the observations recorded by Mr. Cogswell, Controller of Printing, Stationery and Stamps, in his note (Appendix F), in favour of merging the existing stationery offices in Madras and Bombay, together with any others that may be established in other provinces, in the central stationery department; and we commend Mr. Cogswell's note to the consideration of Government.

Ordnance  
inspection  
staff.

161. We also invite attention to the suggestions made in Chapter IX, paragraph 120, regarding the absorption of some of the inspection staff employed at present under the Director General of Ordnance in India.

#### *E—Details of organisation—Initial stage.*

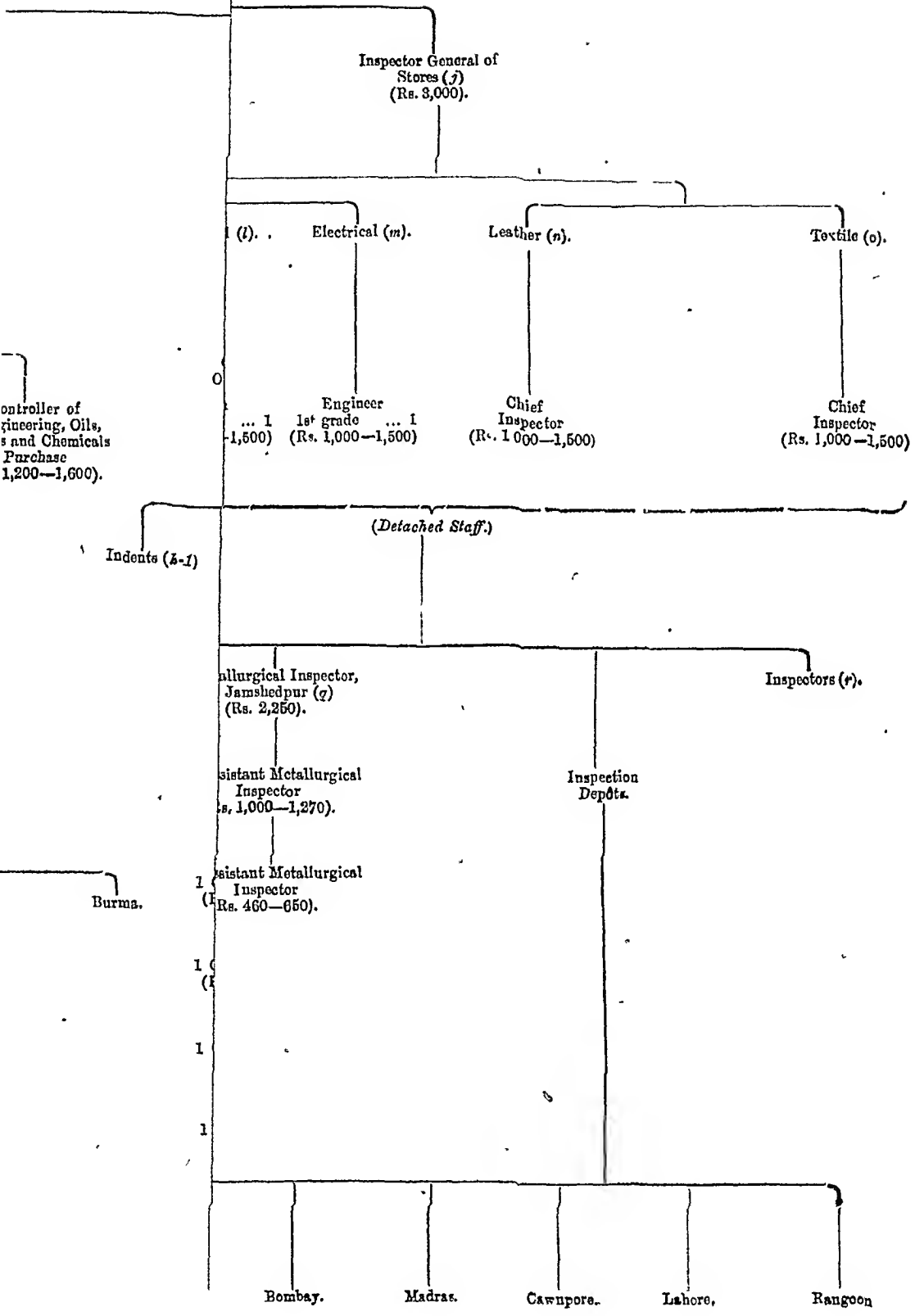
Diagram.

162. The form of the organisation described in the preceding sections is shewn in a diagram on the page opposite. For particulars of the professional and other qualifications desirable in, and the methods of recruitment proposed for, the various members of the staff, the reader is referred to Chapter XIV. The reference letters, entered in brackets in various parts of the diagram, refer to the following explanations. Figures are entered in the diagram to indicate the salaries which we consider appropriate for the superior appointments, in order to indicate more clearly the nature of the organisation proposed, but it is impracticable to work out reliable estimates of cost in detail, and for further particulars of probable cost, including that of the subordinate staff and contingencies, we refer to the comprehensive estimate given in Chapter XVI.

Director  
General  
of Stores.  
(a)

163. The department will be in charge of one high official at headquarters, the *Director General of Stores*, who will be directly responsible to the Government of India in the Department of Industries. The post is a very important one, the holder of which will exercise wide powers, and for it we consider that a lower salary than Rs. 3,500 per mensem would be unsuitable. His duties will comprise the general supervision of the whole of the work dealt with in the department, both in regard to purchase and inspection, and he will be responsible for ensuring that it is efficiently carried out in accordance with the approved policy of the Government of India.

# ORGANISATION.





164. *The Intelligence and Purchase Branches* at headquarters will both be in charge of the *Director of Intelligence and Contracts*, an officer for whom we propose a salary of Rs. 2,000—2,500, and who will be vested by the Director General of Stores with general responsibility for the efficient working of the entire purchase side of the organisation, together with the arrangements for publicity and intelligence. The branch for the latter should include a special section, which would be in touch with the military authorities with a view to perfecting, during peace, any arrangements necessary to meet the needs of any eventualities likely to arise. The Director will also be responsible for supervising the work of the provincial agents in respect of purchase and intelligence.

Director of  
Intelligence  
and  
Contracts.  
(b)

165. Working directly under the Director of Intelligence and Contracts will be a *Controller of Provincial Agents and Intelligence*, an officer on a salary of Rs. 1,750—2,000 with an office divided into the following sections:—

Controller  
of Provincial  
Agents and  
Intelligence.

*Publicity*, the functions of which will be to publish quarterly a bulletin showing value and quantity of individual classes of stores ordered, or obtained, from other than indigenous sources of manufacture. (This bulletin should be sold to the public at a price which will defray cost of paper, printing and postage).

*Home prices*, which will maintain records of current prices of imported stores for the information of purchasing officers to enable comparisons to be made with local quotations. This section will also furnish all necessary information in respect of steamer and railway freights.

These important sections will be in the immediate charge of a *Superintendent of Statistics*, a capable official of subordinate rank, on a salary of Rs. 400—600.

166. The several *Provincial Agents*, whose functions are described in paragraph 157 and for whom we consider salaries of Rs. 1,200—1,600 will be suitable, will be stationed at Calcutta, Bombay, Madras, Rangoon, Cawnpore and Lahore; while at Karaehi there would be, if required, an *Assistant Provincial Agent*, on Rs. 800—1,000, subordinate to the Provincial Agent at Lahore. The Provincial Agents will ordinarily correspond on all general matters with, and will receive their instructions from, the Controller of Provincial Agents and Intelligence at headquarters, to whom they will be directly subordinate. In special cases, however, they may also correspond direct with the specialised controllers of purchase at headquarters; this would usually be done when they are called upon to make enquiries, or have suggestions to offer, regarding matters peculiar to those purchasing officers. They will be in administrative and disciplinary charge of the local inspection depôts, and be responsible for the despatch from those depôts of all goods consigned to indentors. It will be noticed that the Indian Stores Department is not represented by provincial agents in the Central Provinces, Bihar and Orissa, and Assam.

Provincial  
Agents.  
(d)

Until such time as these provinces are sufficiently developed, from an industrial and commercial point of view, to render necessary the appointment of provincial agents, we would suggest that they should make their purchases, when desired, through the most convenient Provincial Agent, and that their Directors of Industries should correspond direct with the Director General of Stores with reference to questions of industrial intelligence.

Controllers  
of Purchase.  
(e)

167. The specialised purchasing branches at headquarters will be constituted as self-contained units in charge of responsible officers: these being the *Controller of Leather and Textile Purchase* on a salary of Rs. 1,200—1,600, the *Controller of Timber Purchase and Inspection* on Rs. 1,400—1,800, and the *Controller of Engineering, Oils, Paints and Chemicals Purchase* on Rs. 1,200—1,600. Each of these officers will be directly responsible to the Director of Intelligence and Contracts. Their operations will be conducted from headquarters and, with the exception noted under head (f) below, they will have no provincial representatives though they will utilise the several provincial agents as their local representatives in special cases. They will adopt a procedure, similar to that in force in the India Office Store Department, for splitting up demands into suitable orders, attaching specifications, and calling for tenders. They will watch the progress of contracts, and conduct all miscellaneous correspondence connected with the disposal of particular orders, other than those relating to technical points which can be dealt with direct in certain cases by the Inspection Branch. They will maintain lists of approved contractors, and all records that may be required for future guidance as to the reliability of particular firms. The Controllers of Purchase will also scrutinise duplicates of such Home indents as, under the established procedure, will be sent direct to London by indentors, and will take up with the officers concerned demands unnecessarily sent to the London Branch which either require cancellation, goods of local origin being substituted, or call for a caution to the indenting officers that similar demands should not be repeated.

Conditions  
peculiar to  
timber  
purchase.

168. *The Controller of Timber Purchase and Inspection* to whom, with other purchasing controllers, the preceding remarks apply so far as regards the arrangements at headquarters, will occupy a somewhat different position, in that he will also be responsible for inspection, on which account we have recommended an increased salary. This difference in organisation is occasioned by the special nature of the material in question, as it is difficult, or impossible, adequately to define by specification the quality of timber required; and timber, which may conform to a written specification, may vary widely in quality. Timber, moreover, may frequently be chosen in the log. Notwithstanding the admitted objection to combining purchase and inspection in one individual, we consider it desirable in respect of timber to entrust both these duties to one officer. The duties of this Controller will include the purchase of sleepers for Indian railways. This matter is dealt with at present under an agreement between the principal railway administrations, whereby the railway which

is most conveniently situated in respect of particular sources of supply, buys sleepers from that source for others as well as for itself; thus the North Western Railway makes all purchases of deodar sleepers, in Northern India. This arrangement is said to work fairly well but we think that it will be better to include these operations in the functions of the Indian Stores Department, mainly with a view of achieving the important object of increasing the total supply of sleepers. The purchase of Burma teak for miscellaneous purposes is not at present properly organised, and we anticipate decided advantages, to the departments concerned, from the introduction of a convenient system which will free them from dependence on casual purchase and inspection.

169. To enable the Controller of Timber Purchase and Inspection to carry on his work he must be represented by expert assistants in the principal timber supplying districts; we, therefore, provide for the appointment of four *Assistant Controllers of Timber Purchase and Inspection*, each on a salary of Rs. 800—1,000. These will be stationed in Burma and in the principal timber growing districts of the Northern, Central and Southern parts of India.

Assistant  
Controller of  
Timber  
Purchase and  
Inspection.  
(f)

170. *The Assistant Director-General of Stores* will be an official, on a salary of Rs. 1,000—1,250, directly responsible to the Director General for the working of the general office at headquarters, and in intimate touch with the finance officer in charge of audit and accounts. He will relieve the Director General of all routine work connected with the general administration of the department, and will act as a correlating agent, on behalf of the Director General, in dealing with business affecting more than one branch. He must, however, be regarded strictly as an assistant, and not as a deputy, and no orders of importance will be issued by him on his own authority.

Assistant  
Director-  
General  
of Stores.  
(g)

171. *The General office*, under the Assistant Director General, will be divided into three sections:—

General  
office.  
(h)

The Indents Section.

The Correspondence Section.

The Establishment Section.

*The Indents Section* will be responsible for the initial receipt of indents; for splitting them up into separate portions, when they relate to the work of different purchase branches; and for distributing the demands to the proper Controllers of Purchase. Duplicates of indents, which have been sent direct to the United Kingdom, will also be received in this section, and will similarly be transmitted to the Controllers of Purchase, who ordinarily deal with goods of the classes included in the indents, for the purpose of scrutiny and appropriate action.

*The Correspondence Section* will deal with all correspondence conducted in the name of the Director General, which cannot appropriately be dealt with by any of the specialised officers.

*The Establishment Section* will be responsible for all matters affecting the personnel of the entire department, and will maintain such personal records of indivi-



duals as are necessary. All appointments, leave, promotion and similar matters will be administered in this section.

Accounts  
Section.  
(i)

172. *The Accounts Section*, in charge of an officer of the Finance Department, will deal with all audit and accounts matters immediately concerning the Indian Stores Department. It will receive and pay bills, and will raise debits against the various departments to which services are rendered. For a fuller account of the duties of this section reference may be made to Chapter XV.

The Inspector  
General of  
Stores.  
(j)

173. *The Inspector General of Stores*, on a salary of Rs. 3,000, will be the most important member of the staff under the Director General. The *Inspection Branch*, for the control of which he will be responsible to the Director General, will consist of two divisions, the headquarters and the detached staff. It is explained in paragraph 198, Chapter XIV, that the qualifications for, and the functions of, this post will differ somewhat in the initial and in the ultimate stage of organisation. In the initial stage, with which we are here concerned, he will be in personal charge of the three engineering sections of the headquarters office, described under heads (k), (l) and (m) below, as well as being in administrative charge of the remainder of the inspection staff.

Structural  
and Railway  
Section.  
(k)

174. *The Structural and Railway Section* will be directly controlled, as stated above, by the Inspector General who will need the assistance of two *Engineers*, one 1st and one 2nd grade on Rs. 1,000—1,500 and Rs. 800—1,000 respectively. Where necessary this section will advise on technical points, and will draw up, or assist in the preparation of, specifications of all classes of structural and railway work, and also furnish designs and drawings to enable the purchase branch to call for tenders. After contracts have been placed, it will, through its detached staff in the different places of manufacture, be responsible for carrying out inspection in accordance with the approved specifications and terms of contract. It will also undertake the inspection of structural and railway work, the contracts for which have been placed by the consuming departments themselves.

Mechanical  
Section.  
(l)

175. *The Mechanical Section* will similarly be in the personal charge of the Inspector General, who will be assisted by one *Engineer*, 1st grade, on Rs. 1,000—1,500. The functions of this section will be generally similar to those described under head (k), but will relate to all mechanical stores, machinery and plant, dealt with by the Department.

Electrical  
Section.  
(m)

176. *The Electrical Section* will also be in charge of the Inspector General, who will be assisted by one *Engineer*, 1st grade, on Rs. 1,000—1,500. Its functions will be similar to those of the Mechanical Section, but in respect of electrical stores and equipment.

Leather  
Section.  
(n)

177. *The Leather Section* will be in the immediate charge of a *Chief Inspector*, on a salary of Rs. 1,000—1,500, who will be directly responsible to the Inspector General, and will give advice, where desired by purchasing departments, and will draw up specifications for all leather articles and those of an allied nature. He will

also be responsible, through his detached staff of inspectors, for the inspection of all stores falling under this head, and that these comply with specifications and terms of contract before acceptance by indenting departments.

178. *The Textile Section* will be in charge of a *Chief Inspector* on Rs. 1,000—1,500 whose relations to the Inspector General and duties will be similar to those of the Chief Inspector of Leather; he will deal with all textile materials and goods of an allied nature.

Textile  
Section.  
(c)

179. *The Superintendent of Test Houses*, on a salary of Rs. 1,500—2,000, will be in general charge of the test houses. One already exists in Calcutta (Alipore) and we propose that another should be established in Bombay. He will be responsible for all analytical and physical tests required by the inspection staff, and for all chemical analysis carried out in test houses, *i.e.*, that of oils, soaps, etc. He will be directly responsible to the Inspector General of Stores, and will work in close collaboration with the superior officers of the inspection staff in all matters appertaining to current work. He will have no control over members of the inspection staff apart from those employed in the test houses.

Superinten-  
dent of Test  
Houses.  
(p)

180. *The Metallurgical Inspector*, whom we consider should be paid at a fixed salary of Rs. 2,250 instead of as at present a salary of Rs. 1,750 *plus* a share of certain fees limited to a maximum of Rs. 500, will, with his staff, remain for the present at Jamshedpur at the works of Messrs. the Tata Iron and Steel Company. He will be the technical adviser of the Director General of Stores in all questions relating to the metallurgy and specifications of iron and steel; and will continue to be responsible for ensuring that all materials manufactured by the above-named company on behalf of government departments, and by any other companies which may hereafter undertake the manufacture of iron and steel, are in every way up to the prescribed specifications.

Metallurgical  
Inspector.  
(q)

181. *The Detached Inspection Staff* will be located in the different industrial centres according to requirements. In Calcutta and the neighbourhood the majority of the inspectors will be required for the inspection of engineering manufactures and stores, whereas in Bombay they will mostly be engaged on the inspection of textiles, leather and similar goods. Where inspection depôts are established, and where the work warrants it, a permanent staff of inspectors will be necessary in these depôts. In large manufacturing centres a permanent staff of inspectors will also be required to carry out inspection during course of manufacture at makers' works. Occasions will, however, arise in which it is inconvenient, or uneconomical, to send stores for inspection to places where inspectors are normally employed, and when it will be desirable to inspect at outlying places of manufacture, or at the store depot, an arsenal for instance, of one of the consuming departments. In such cases, it should usually be arranged to depute a member of the inspection staff from a neighbouring centre to carry out the work; since it may not always be feasible to spare the services of one of the ordinary staff for the purpose, we contemplate that it

Detached  
Inspection  
Staff.  
(r)

will be found necessary to supplement the stationary inspection staff by the employment of a number of travelling inspectors, whose duty it will be to visit depôts or factories in outlying districts as circumstances require. An estimate of the numbers and cost of the inspection staff initially necessary at the various centres, on a scale sufficiently ample to allow for travelling inspectors, is given in the following statement :—

Rs.

## Calcutta—

1 Engineer,	1st grade	1,000—1,500	} Engineering and Hardware.
with :—			
1 Examiner,	1st grade	700—900	
3 Examiners,	2nd grade	550—650	
1 Examiner,	2nd grade	550—650	} Textiles.
for castings			
1 Assistant Chief Inspector		800—1,000	
with :—			
1 Examiner,	2nd grade	550—650	Textiles.
1 Examiner,	2nd grade	550—650	Miscellaneous.

## Madras—

1 Assistant Chief Inspector	800—1,000	Textiles	} and Miscellaneous
with :—			
1 Examiner,	2nd grade	550—600	Leather

## Bombay—

1 Engineer,	1st grade	1,000—1,500	} Engineering and Hardware.
with :—			
1 Examiner,	1st grade	700—900	
1 Examiner,	2nd grade	550—650	
1 Assistant Chief Inspector		800—1,000	Textiles.
with :—			
2 Examiners,	2nd grade	550—650	Textiles.
1 Examiner,	2nd grade	550—650	Leather.
1 Examiner,	2nd grade	550—650	Miscellaneous.

## Cawnpore—

1 Assistant Chief Inspector	800—1,000	Textiles	} and Miscellaneous
with :—			
1 Examiner,	1st grade	700—900	
2 Examiners,	2nd grade	550—650	
			Leather
			Textiles

## Lahore—

1 Assistant Chief Inspector	800—1,000	Textiles	} and Miscellaneous
with :—			
1 Examiner,	2nd grade	550—650	
1 Examiner,	2nd grade	550—650	
			Leather
			Textiles

## Rangoon—

1 Examiner,	2nd grade	550—650	Miscellaneous.
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*F—Development of organisation—Ultimate stage.*

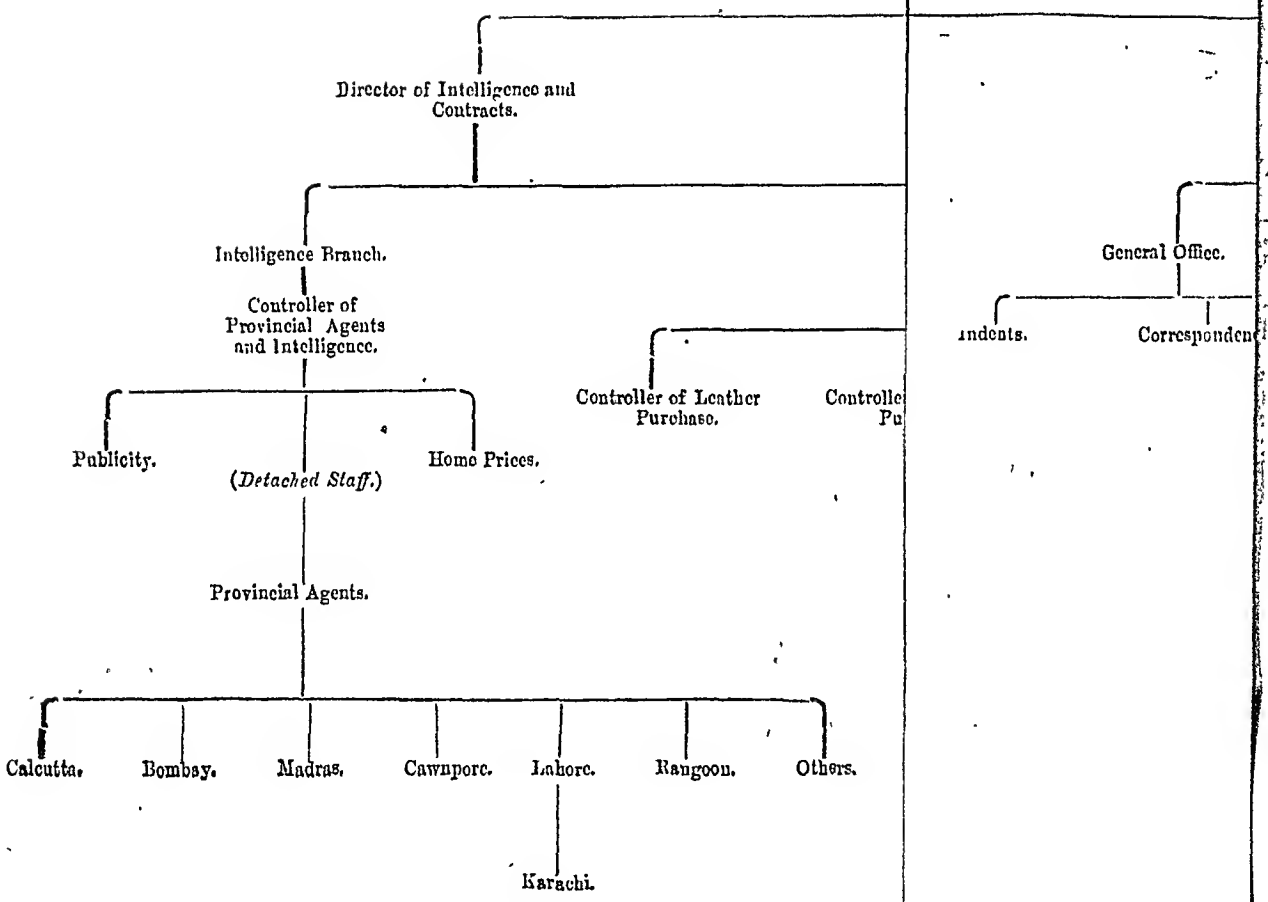
182.  
(5)

The organisation described above should, in our opinion, be adequate to undertake the work likely to fall to the lot of the Indian Stores Department in the earlier stages of its existence. It is based on a consideration, both of the volume of work anticipated and of the fact that, whatever the volume of work, there is an irreducible minimum in the numbers and composition of the staff necessary. The latter is an



THE INDIAN STORES.

STORES.



important consideration as the case is affected by so many indeterminate factors, such as the uncertainty as to how far local Governments and company-worked railways will make use of the department, and the impossibility of forecasting the extent of requirements after the war. When so many conditions differ from those prevailing in the past, a reliable quantitative estimate of the work to be provided for is impossible, but it is obvious that, if it is decided to undertake any particular kind of work, for instance the inspection of textiles, this, in itself, sets a minimum limit to the staff required, as at least one expert in this particular line will be necessary. This has been the governing factor in determining the form of our proposals. If the department fulfils expectations, it seems certain that the demands made upon it must increase and its operations expand. The extent of such expansion, and the point at which it will involve a corresponding increase of establishment in the various branches, must be left to the test of time; but we think that it can be forecasted, at least in part, and, in another diagram, (on the preceding page), we show the form that we anticipate the expanded department will ultimately assume.

183. It will be seen that, in our opinion, both the purchase and inspection branches will ultimately have to be enlarged, and we believe the principal increases found necessary will be as follows:—

**Increase in staff.**

*On the purchase side.*—Instead of one Controller for leather and textile purchase, it will probably be necessary to appoint a separate Controller for each; similarly for engineering, oils, paints and chemicals it will be necessary to appoint one Controller for engineering stores, and another for oils, paints and chemicals. Additional provincial agents will also be required, both for the convenience of local Governments, and to strengthen the Indian Stores Department.

*On the inspection side.*—We anticipate that the increasing volume of administrative work imposed upon the Inspector General, and the growing importance of the three sections concerned, will alike render it impossible for this officer to exercise any further, direct executive control over the structural and railway, the mechanical and the electrical branches, each of which will require the undivided attention of a highly qualified engineer. We have indeed entertained some doubt as to whether we should not provide this staff from the outset, but we have decided in favour of the less expensive arrangement, indicated in the preceding section (E), which we think should be able to meet initial requirements.

## CHAPTER XIII.

## PROCEDURE.

Difficulties  
to be  
contended  
with.

184. Before describing the procedure for the submission of indents by consuming officers, and their disposal by the Indian Stores Department, it is necessary to allude briefly to some of the difficulties which are likely to attend the initiation of the department. Judging from recent indents which have been examined, purchase will have to be arranged by the Indian Stores Department from the beginning for many hundreds of items, most of the requirements being notified in the annual indents of the departments concerned. In addition, all departments will submit supplementary indents at irregular intervals for unforeseen or abnormal requirements while the Military Works Services and the Public Works Department, on account of the nature of their work, are likely to submit indents at any time. No agency could undertake the work of provision with any prospect of success, until it is in possession of certain data regarding sources of supply, capacity of contractors, previous rates and so on. It will be seen from Chapter IV that the annual indents for any year are prepared in the previous year; those for Home Supply are generally completed by the autumn, the contracts for Local Supply stores being usually settled later in the year. Assuming the Indian Stores Department to come into being at the beginning of a financial year, *i.e.*, from 1st April, it would not be called upon to scrutinize the Home Supply indents until the autumn, and to take up contract work in connection with Local Supply stores until later; while, in the absence of the necessary data referred to above, it would be totally unequipped at first to undertake purchase on indents of the current year.

Necessity  
for time to  
organise.

185. We cannot too strongly emphasize the necessity for allowing the new department sufficient time to organise before requiring it to commence the actual work of provision of stores. Most of the witnesses who appeared before us recognised the advantages of a central purchasing agency, but not a few considered that the departments, notably railways, expected to make use of it, were themselves large enough to secure these advantages, and many considered that an agency destined to deal with so many departments could not fail to be unwieldy. This opinion was based on their experience of the Indian Munitions Board. There is no doubt that, among many who were supplied with stores by the Indian Munitions Board, a strong feeling of disappointment exists. They have failed to appreciate the size of the task set the Board, and the great handicap under which it worked from the outset in the matter of lack of personnel, especially of trained inspectors, and in the abnormal market conditions occasioned by the war; nor have they any means of knowing how great was the result achieved. The points that bulk large in their view are the individual instances of failure known to them, both as regards purchase and inspection, and, in ignorance of how small that percentage of failure actually was, they are inclined to predict similar failure on the part of any department that takes up work of a corresponding nature. From

the returns studied and the figures recorded in Appendix D, we fully appreciate this task, and we have been advised by competent witnesses of the difficulty to be expected, even under peace conditions, in recruiting men of the requisite stamp. As explained in Chapter XIV on the subject of recruitment, we anticipate that some departments, which are to deal with the Indian Stores Department, will make available staff and data connected with purchase and inspection. Time must be taken in co-ordinating data from several sources, in welding such staff as can be obtained into a first class working machine, and in arranging for office and depôt accommodation. We anticipate that some eight or nine months must elapse from the date of its inauguration before the Indian Stores Department will be ready to take up the actual provision of stores. As regards inspection, the need for time in which to organise is, in some respects, equally essential. At present the Army alone possesses a separate inspection branch; other departments utilise for this purpose experts whose main duties lie in other directions. There are, however, exceptions in regard to articles manufactured in Bengal, which are inspected by the Superintendent of Local Manufactures, Alipore, and in the products of the steel works at Jamshedpur, which are inspected by the Metallurgical Inspector at that place. It will be necessary for the Indian Stores Department to recruit, and train, its inspection establishment, a matter which will require time.

*Procedure of Indenting Departments.*

186. The method of calculating annual and periodical requirements will remain as at present, unless altered for reasons of their own, in all branches and departments which will look in future to the Indian Stores Department for the provision of their stores. Indents will continue to be prepared in printed lists, where such are already in use, under the three headings of supply, Home; Local; Government Factory or Departmental Central Workshop. Departments not at present using such lists will continue their present procedure but from paragraph 191 below it will be seen that it is contemplated that ultimately all departments should be provided with such lists. At first, at least, the dates for submission of indents will be those at present laid down; experience may show the need for alteration when indents from many departments have to be co-ordinated in one office. The advisability of purchasing when the market is favourable has been emphasised; this refers specially to items connected with seasonal crops, *e.g.*, jute, cotton, etc., and at times to other commodities. Purchasing officers may be expert in this from the beginning; in any case they will become so with experience, and can then arrange for any alteration of date of submission of indents which may be necessary.

**Preparation  
and submission  
of  
indents.**

187. In the case of Home Supply indents, both annual and supplementary, beyond the submission of duplicate copies to the Director General of Stores, India, there will, to begin with, be no change in the existing procedure. The indents, after check, compilation, and printing in a headquarters office, or, when this is not the existing procedure after preparation in the authorised

**Home Supply  
and Factory  
indents.**



form in the local office, will be submitted direct to the London Branch, duplicate copies being sent at the same time to the Director General of Stores, India, for scrutiny. This scrutiny is intended to detect any entry in a Home Supply indent of articles which can be purchased in India of suitable quality and at a favourable price. In some instances it may be possible to suspend by cablegram the supply of such stores, but, as a rule, it will be preferable to let the demand stand, and to point out to the indenting officer that the article can be obtained in India, and should be so obtained on future occasions. By adopting this course all possibility of inconvenience will be obviated; but the Director General of Stores, India, will, in any case, advise indenting departments of stores, which, in future indents, must be transferred from the Home Supply to the Local Supply category. Similar procedure would be adopted as regards annual and supplementary indents on Government factories and dockyards, and departmental and railway central workshops. In these cases also the object is the same, namely to divert to private firms work orders which are within their scope at reasonable rates. Duplicates of indents for lethal weapons and ammunition, whether on the London Branch, or on government factories in India, need not be submitted to the Director General of Stores, India.

**Local Supply stores.**

188. For Local Supply stores the procedure will differ depending upon the nature of the stores. Stores coming under the following heads:—

- (i) textiles and miscellaneous stores allied to textile manufactures;
- (ii) leather and miscellaneous stores allied to leather manufactures;
- (iii) cement, oils, paints, varnishes and chemicals, and stores allied to these;
- (iv) timber in the log or in scantling, sleepers and all miscellaneous stores the basis of which is timber;

will be included in the Local Supply indent to be preferred on the Indian Stores Department, and this will be submitted direct by the indenting officer, or through the head of the department, according to existing practice. For plant and machinery, including electrical material, for all iron and steel structural work, railway material and appliances, and for miscellaneous allied stores not included under the sub-heads above, we consider that the technical officers of the Railways, Military Works Services, Public Works Department, Ordnance Factories, Government Dockyards and Telegraph Department have sufficient expert knowledge and experience to enable them to carry out, or supervise, their own purchases, subject to such scrutiny of the transactions by the Director General of Stores as he considers necessary. The demands of each indenting officer under these heads usually differ, and orders cannot be bulked; no advantage would, as a rule, be obtained by the submission of indents of this nature to a central authority. The procedure recommended is that the indenting officer should issue specifications, call for tenders, and

exercise his judgment in placing the contract. The powers of purchase of officers in this respect are, in the case of structural work, machinery, etc., manufactured in India, limited only by their powers of acceptance of contracts, and in the case of imported machinery, etc., the limits of purchase are those recommended by us in Rule IX of the revised Stores Rules given in Chapter XI. A copy of the specification, and a request to inspect, should be sent to the inspecting officer of the locality where the stores are being procured. The purchasing officer should furnish the Director General of Stores monthly with lists of articles exceeding Rs. 5,000 in value, purchased under this head, showing the price paid, and the firms from which obtained.

189. When care and intelligence are displayed in the preparation of the annual demand, the number of items in supplementary demands do not, as a rule, exceed ten per cent of those in the annual demand. This refers to the Army, Railways, and other departments, whose requirements are recurring and can be foreseen. The Military Works Services and the Public Works Department, are frequently called upon, without notice, to undertake new work, and supplementary demands must be expected from them at any period of the year. The amounts of stores to be purchased on the annual indents will be very large, and for these running contracts will be the rule. These running contracts will frequently, we believe, provide also the means of purchase of items required on supplementary demands, including those of the Military Works Services and Public Works Department. It will be convenient therefore to keep indenting officers of all departments advised of all running contracts likely to be of use to them, irrespective of whether these officers have demanded any of the stores in question. Annual requirements of Local Supply stores, of the descriptions enumerated in heads (i) to (iv) in paragraph 188 for all departments, and of all kinds for the Army, other than for Ordnance Factories and for the Military Works Services, will be notified to the Indian Stores Department in an Annual Indent. However small those of any one department may be, the advantage of bulk supply will probably be secured by co-ordination with the requirements of other departments. When in practice this is found not to be the case, indenting officers will be instructed to purchase petty requirements locally. In the case of supplementary requirements, the action of the indenting officers will depend on whether a running contract exists or not for the stores in question. If one exists, he need only apply to the firm concerned for the additional amounts required by him, sending to the Controller of Purchase concerned a copy of his request. In the absence of a running contract, he will, if the amount involved is within his financial powers, arrange purchase himself; if beyond his powers, he will submit a supplementary demand to the Indian Stores Department. Every indent, whether for Home, Local or Government Factory and Central Workshop Supply, should be accompanied by a programme for supply and an estimate of the cost involved. We have not considered what the procedure within a department should be, whereby an administrative officer will be kept acquainted by his executive officers

Annual and  
Supplementary  
demands.

of indents preferred by them on the Indian Stores Department; conditions vary, and it is best left to departments to detail their own procedure.

*Procedure in the Indian Stores Department.*

**Receipt of  
indents.**

190. Indents, whether for actual purchase or for scrutiny only, will, on receipt, be dealt with first in the Indents Section of the General Branch. It will be the duty of this section to watch the receipt of indents, to ensure the arrival of annual indents by due date, and to see that all indents are in correct form, so that the work of scrutinising, abstracting, etc., may proceed without delay. This section will be responsible for all action required on indents up to the stage at which they are handed over to the Purchase Branch.

**Elimination  
of items**

191. Duplicate indents of Home, Government Factory, or Central Workshop Supply will be similarly dealt with in the Purchase Branch; that is a careful scrutiny will be made of the items to ascertain whether any of the articles can preferably be produced in India, either by manufacture or by local purchase. For the first year at least, before the Purchase Branch is in possession of up-to-date figures, it will be advisable to allow any such items to remain in the Home or Government Factory indent, but to communicate with the indenting officer concerned, to prevent similar entries in subsequent indents. When the Intelligence Branch is fully organised, and the printed lists of Home Supply, Local Supply, and Government Factory or departmental Central Workshop stores are up-to-date for all departments, there should be few instances of articles being demanded from other sources which can be procured in the Indian market. Throughout the year Directors of Industries will be in touch with the Director General of Stores, usually through the provincial agents, advising him of new products locally manufactured; whenever possible, the Director General of Stores will place trial orders for such products. On the results of the reports of the inspection staff and of consuming departments will depend whether such items are transferred from the Home Supply, or Government Factory or Central Workshop Supply lists to the Local Supply list. From the bulletins and other information published from time to time, branches, agents of firms, and merchants will become familiar with government requirements, and will, no doubt, make enquiries with a view to tendering at rates lower than those quoted by the London Branch; and it may be anticipated that this also will lead, from time to time, to the amplification of the Local Supply list.

**Preparation  
of draft  
orders.**

192. In the case of Local Supply indents, the first duty, after receipt by the Indent Section, will be to abstract the items into forms suitable for distribution to the several sections of the Purchase Branch. We would here invite attention to the procedure in force in the office of the Director General of Stores, India Office, detailed in Appendix E, which we recommend for adoption in India to the extent suitable. The forms when ready will be passed to the respective Controllers of Purchase who, in considering tenders, will be guided by the programmes and estimates submitted with the indents; when these cannot be complied with, the indenting officers will be consulted and arrangements made which suit them best.

Invitations  
to tender.

193. Controllors of Purchase will usually call for tenders only from suitable firms; a list of these will be maintained in each branch, and will be supplemented from time to time according to information received from the Intelligence Branch as to the capabilities of firms entering the field of supply. Invitations to tender will be accompanied by references to specifications, patterns, etc., as is the custom with the Store Department, India Office (see Appendix—E, paragraph 3). It will not be necessary or desirable, as a general rule, to call for public tenders owing to the fact that the provincial Directors of Industries, through the Intelligence Branch, will ensure that all capable firms are on the list of approved contractors. The responsibility for acceptance of tenders will rest with the Director General of Stores, who will delegate his authority to such extent as he may consider desirable. On acceptance of tenders, the Controllors of Purchase will notify indenting officers. Whenever the Director General of Stores is unable to arrange for the provision from indigenous sources of supply of the entire amount of any stores under heads (i) to (iv) in paragraph 188 he will arrange for the purchase of the balance through the London Branch. It has been represented to us that, before Army contracts are placed in England, tenders are submitted to the consuming departments for acquiescence as to the tenderers recommended, and we have been urged to adopt this procedure in India: in this respect however conditions in India will differ. In the United Kingdom, inspection of miscellaneous stores is, we understand, under the control of the Director of Equipment and Ordnance Stores, and that officer is consequently able to report on the competency and reliability of contractors tendering; moreover, the officers concerned are in closer touch in England than is possible in India. In this country inspection will be under the Director General of Stores, India, and, as the bulk of the stores will pass direct from the workshops of firms, or through inspection depôts, to the consuming departments, the latter will have no knowledge of the contractors in question. In the event of a mistake being made by inspectors, the consuming departments will always be in a position to detect it, and bring it to the notice of the Director General of Stores, and this would appear to suffice in this respect. In cases of dispute as to any stores being fully up to specification or standard, and the manufacturer not accepting the decision of the inspector, appeal will be made to the Inspector General of Stores, whose decision will be final.

Watching  
contracts.

194. Notifications of all contracts made, specifications concerned, dates and places of delivery, with any details concerning inspection will be made to the Inspection Branch, which will arrange for such inspection as may be necessary, either during, or after, manufacture at the makers' works, at inspection depôts, or, when necessity demands, at the final place of delivery, *i.e.*, consumers' store depôt. The progress of supply on every contract made will be watched by the Controller of Purchase concerned, progress being marked up from certificates submitted by inspectors. Where the programme is being departed from, the Controller of Purchase will be responsible for taking action to expedite the supply, or to supplement it from other sources, so as to obviate inconvenience to the indenting officer.

## CHAPTER XIV.

## RECRUITMENT.

Conditions of  
service.

195. The establishment of the Indian Stores Department, detailed in the preceding chapter, may be divided for purposes of recruitment into two main categories :—

Administrative and Business ; and  
Professional.

The latter may conveniently be sub-divided into :—

Engineering ; structural, mechanical and electrical ;  
Chemical ;  
Leather, Textiles and Miscellaneous.

We have, in our proposals, indicated two stages of development; the smaller is the least which it appears desirable to adopt as the first working organisation, the larger is that which we think should eventually be worked up to. The expansion to the larger scheme must depend mainly on the result of experience gained, and we therefore confine our consideration at present to the initial scheme. We have to consider the qualifications required for the superior, and upper subordinate, establishments; the sources from which the personnel can be most suitably recruited; and the conditions of service, in each case. Once the department is fairly established it will generally be advisable, at least on the administrative side, to engage only junior men in each branch or grade, and to fill up vacancies by promotion. We anticipate that it will be possible, as the result of the developments of technical education, and the inauguration, of the Chemical, and Industrial, Services recommended by the Industrial Commission, eventually to obtain nearly all recruits in India, though how far it will be found practicable to affiliate the staff of the Indian Stores Department to these services, experience alone will show. At the present time we can only consider the department as a separate new self-contained organisation for which an entire staff has to be obtained, and it will be necessary to recruit from those employed in government departments, railways or elsewhere in India. It may, however, be found advisable at the commencement temporarily to borrow the services of certain officers from established departments, and it seems probable that some of the necessary staff might in the first instance be obtainable from the Board of Industries and Munitions, which at present employs a considerable establishment, on a temporary footing, in duties necessitating qualifications similar to those required by the members of the Indian Stores Department. As a general principle we consider both officers and subordinates should be engaged on a five years' agreement, under the usual conditions of government service including provident fund. On the termination of that period, they should, if satisfactory, be eligible for permanent re-engagement on a provident fund basis.

Preference  
to Statutory  
Natives  
of India.

196. We recommend that, whenever suitable qualified men can be recruited in India, preference shall be given to statutory "natives of India", defined in

Section 6 of the Government of India Act, 1870 (33 Viet. Cap. 3) as including "any person born and domiciled within the Dominions of Her Majesty in India of parents habitually resident in India and not established there for temporary purposes only". By the term 'Indian' we include, therefore, not only inhabitants of India and Burma of unmixed Asiatic descent, but members of the Domiciled Community whether Europeans, or Anglo-Indians.

197. The administrative and business establishments may first be considered.

Qualifications—  
Administrative  
and Business.

*The Director General of Stores* should be an officer with wide Indian administrative and business experience, and also possess a general knowledge of stores, including plant and machinery, and business transactions connected therewith. He should be selected, or appointed, by the Secretary of State on the recommendation of the Government of India. The appointment should usually be for five years. Opinions differ as to whether a suitable commercial man could be obtained, or would remain in the post, at a salary acceptable by Government; if such a man can be found we would recommend that source of recruitment, otherwise we would suggest a man with experience similar to that of an Agent of a railway or of a Chief Engineer in the Public Works Department as suitable for the appointment.

*The Director of Intelligence and Purchase* should be an officer with qualifications differing but little from those of the Director General; he must, however, possess practical experience in making contracts. The most suitable man should be selected, and be appointed by the Government of India from whatever source he can be obtained. A man with wide commercial experience, gained either in a business undertaking or in one of the commercially-managed departments of Government, would, we consider, be suitable for this appointment.

*The Assistant Director General of Stores* will be in charge of the General Office, and should be an officer with sound practical experience in office routine, including a knowledge of stores transactions; we would suggest recruitment from an existing government department or from a railway.

*Controllers of Purchase and Provincial Agents* must be officers with general business experience and capacity and each should preferably possess some practical knowledge of the class of commodities with which he will have to deal; since, however, they will be assisted by the advice of technical experts of the inspection branch, specialised technical knowledge is not essential, as each will usually deal with several different classes of stores, knowledge of all of which would be usually impracticable; they should be selected from government departments, or from railways, or from commercial sources. *The Controller of Timber Purchase and Inspection* must have technical knowledge, and should preferably be recruited from the Imperial Forest Service. Men of considerable tact will be required for the posts of *Provincial Agents*, as they

will have to act as liaison officers between local Governments and the Director General of Stores. *The Provincial Agent, Rangoon*, must, for the present, possess engineering qualifications, since he will not, at the outset, have the assistance of expert advice in this direction.

*The Finance Officer* will be appointed, and his duties, defined by the Finance Department in consultation with the Director General of Stores.

**Qualifications—  
Professional.**

198. In considering the qualifications required for the professional establishments, it is important to bear in mind that it will be the duty of the Indian Stores Department not only to meet requirements to the satisfaction of the consumers, but also to help and assist the development of Indian industries, especially in the much needed direction of raising the standard of manufacture and finish to that of articles made in Europe. The general policy of giving preference to statutory natives of India possessing suitable qualifications should be adhered to; but to attain the objects in view it will, we consider, be necessary at the commencement to introduce in this branch at least a proportion of men possessing practical knowledge and experience in the latest European practice, and we would suggest the desirability of obtaining some men from the inspection branch of the Store Department, India Office.

*The Inspector General of Stores* will be an officer whose qualifications in the initial scheme will differ somewhat from those that will be required eventually. As already stated, one of the main functions of the Indian Stores Department will be to raise standards of quality, and to give expert advice as regards specifications, designs and technical plant, thus to some extent fulfilling the functions of consulting engineers. To carry out these duties efficiently expert knowledge of the highest calibre is essential. In the fully developed scheme we have accordingly provided for three highly qualified expert engineers, namely, structural, mechanical and electrical, to advise and assist the Inspector General, who obviously cannot possess complete knowledge in all three branches. We anticipate, however, that the amount of work to be done in this direction will be comparatively small at first, and, though we consider the complete organisation should be adopted as early as possible, we have, in the initial scheme, omitted these three experts, mainly to keep down the initial cost. At the commencement therefore it is essential that the Inspector General should possess wide general engineering qualifications and experience; in the fully developed scheme he should possess high engineering qualifications combined with practical engineering and, if possible, Indian experience. The Inspector General's appointment should be for a period of five years.

*Engineers*, once the department is in working order, should be recruited on the principles advocated by the Industrial Commission, and their age on entering the department should not exceed 25 years. To commence with, staff for each of the three branches, structural, mechanical and electrical, must be recruited from whatever source suitable men can best be obtained; they should by preference possess a recognised diploma,

each in their own profession. We recommend advertising for candidates, and the creation of a Selection Board in India with an Indian member. If sufficient fully qualified men cannot be obtained by this means, the remainder should be selected by a Board in England.

*Chief and Assistant Inspectors* must have a thorough technical knowledge in their respective branches; appointments should be made from candidates who possess a first rate character and record. They should have passed, with credit, through a suitable course of training in India, or be students of Indian technical colleges, and have obtained a full diploma in their respective subjects. For the first staffing of the department, we recommend advertising and the use of Selection Boards as in the case of engineers.

*Examiners* will be of subordinate rank, and must have expert technical knowledge of textiles, hardware, oils, paints, and chemicals, or miscellaneous stores, respectively; expert knowledge of trades and a first rate character and record are the essential qualifications. Normally they will be recruited from industrial schools or colleges in India; but, in the first instance, they should be selected by the Director General of Stores by advertisement in India, and should include a good proportion of men with practical up-to-date British experience. We recommend that a certain number of men from the inspection branch of the India Office Store Department should be engaged if possible. The Inspectors of the Superintendent of Local Manufactures will be absorbed.

*The Test House Staff* at the Alipore Test House should be taken over, and any further chemists, or staff, required, either for the Alipore or for the proposed Bombay Test House, should be obtained by the methods proposed by the Chemical Services Committee of 1920. Should a Chemical Service be established, it will be for further consideration whether the chemists of the Indian Stores Department should not be affiliated with that service. As, however, the number of chemists required will be few, and their duties confined mainly to analytical work, it will probably be found desirable for the chemists of the Indian Stores Department to belong to that department permanently.

*The Metallurgical Staff* at Jamshedpur will be taken over, and any further appointments will be a matter for special recruitment.

199. In the Despatch, No. 86-Revenue, dated the 25th September 1919, in which the Secretary of State for India communicated his approval of the general principle of an agency for the purchase and inspection of stores in India, he alluded to the suggestion that had been made that, with a view to keeping the Indian and Home Store Departments up-to-date and co-ordinating their methods, interchanges of personnel should take place. Should our recommendations as regards stores purchase policy and the future relations of the two departments be adopted, it will follow that the objects indicated will largely be attained, as the control will be unified, and the staff in India would to some extent be drawn from the surplus staff in London.

Interchange  
of staff.



Speaking in his capacity as Director General of Stores, India Office, our colleague Mr. Collier, agrees that advantage should be taken of the existence in England of a considerable body of trained officials, and thinks it might be possible, and would afford valuable assistance in organising the Indian Stores Department to fill some of the new appointments by men transferred from the Home establishment. For most of the appointments on the purchase side of the department we think Indian experience almost essential, but it might be advantageous to appoint at least the Controller of Purchase who will deal with engineering stores, from the source indicated. On the inspection side, staff of the necessary qualifications, might more freely be obtained from the Store Department, India Office, or from the inspection staff of the Consulting Engineers associated with it; and we think that applications should be invited through the Director General of Stores, India Office, to fill a number of the proposed appointments of mechanical engineers, and examiners of machinery and hardware, oils, paints, etc., and textiles. These remarks relate to the initial organisation, but, apart from this, we should be in favour of as free an interchange of personnel as may be feasible, and recommend that advantage should be taken of opportunities, that may present themselves, to fill vacancies in India and in London by suitable officers, who may be willing to accept transfer. It is possible, for various reasons, that such interchange of staff may frequently prove not to be possible, and, should this be the case, we think that it should be supplemented by the temporary deputation of officers from either side, so that, both in India and in London, the procedure in force, and the difficulties experienced, may be fully appreciated, and that the advantages of local experience in each country may be gained. Men thus temporarily deputed, either to the United Kingdom or India, should be treated as supernumerary to the regular establishment, and be regarded as employed on a 'study course.'

## CHAPTER XV.

## FINANCIAL ARRANGEMENTS.

200. We contemplate that an Accounts Section will be responsible for making payment, from headquarters, of bills for stores supplied under the orders of the Director-General of Stores; for transferring debits to the departments concerned; for payment of all departmental salary bills and incidental charges; and for assisting the Director General in the preparation of his annual budget estimate. Doubtless, following the usual practice, this section will be in charge of an officer of, and directly responsible to, the Finance Department. We see no objection to such an arrangement provided the section is located in the same office as, and works in close co operation with, the Director General of Stores and his staff. We consider this condition essential, as, where the executive and financial officers are not in close contact, there will inevitably arise delays in payment, accompanied possibly by misunderstanding and friction. It is for this reason that, in the preceding detail of the organisation, we have shown the Accounts Section as a part of the General Branch of the headquarters office, our object being to emphasise the association without necessarily implying subordination.

Account  
Section.

201. It will be unnecessary for provision to be made, in the budget estimates of the Indian Stores Department, for funds to cover purchase, as these will be provided for in the estimates of the departments for whom the stores are bought, and to which the debits will be transmitted by the Accounts Section. Cash assignments for the funds required at treasuries to meet payments will be granted by the provincial Accountants General concerned, in accordance with cash requirement forecasts prepared by the head of the Accounts Section, in consultation with the departments concerned and with the Controllers of Purchase; the forecasts will be modified from time to time as occasion demands. Payments in the United Kingdom to, and at the instance of, the London Branch would, we assume, still be made by the Accountant General at the India Office, and be audited by the Auditor for Indian Home Accounts, as is the practice at present in the case of the Director General of Stores, India Office.

Provision  
of funds.

202. It has been mentioned that indents sent to the Director General of Stores, India Office, under the existing system, show the estimated cost of each item, and thus give an indication as to the extent to which funds have been earmarked to cover the purchase of the stores asked for; and that, when the expenditure is likely considerably to exceed the estimate, reference is made to the indenting officer before the order is placed. Similarly, if purchase is made at a price much below the estimated cost, the indenting officer is advised of the saving effected. The need for a similar procedure in respect of purchases in India has not hitherto arisen, as such purchases are under the direct control of the department against whose budget allotment the cost falls. But when departments of Government have to place their orders, as we now propose, to a large extent on an independent agency, such as the Indian Stores

Pricing of  
indents.

Department, it is clear that the Indian procedure must be assimilated to that in force at the India Office ; failing this there would be great danger that, after stores for a department had been purchased and debits raised, the budget funds, which should have been reserved to meet the charges, had been expended in other directions. Even apart from the inconvenience caused by the consequent excesses over grants, there would be a wide field for complaint on the part of indentors if they were to remain in darkness, until debits were actually raised, as to the cost of stores demanded by them. We advise, therefore, that it be made the rule that all demands placed on the Indian Stores Department should indicate that budget funds to a specific extent have been reserved to meet the anticipated expenditure. The Director General of Stores should be held responsible for keeping the indentor advised of any material departures from the estimate, and for not entering into commitments likely to cause an appreciable excess over the amount reserved by the indentor, until the latter has been consulted and has agreed in the action proposed.

Interest on  
delayed  
payments.

203. Here may be mentioned a point to which our attention has been invited, namely the occurrence of delays in payment to firms for goods supplied by them, and the question whether interest should be allowed, as a matter of course, in cases of undue delay. We do not think that the case is one for which it should be necessary specially to legislate. It should be possible, ordinarily, to ensure that bills are not unreasonably delayed, and if the Accounts Section, as we have urged, is closely associated with the executive branches, this should present no difficulty. We understand that delays in payments have sometimes been due to the failure on the part of officers, to whom goods have been despatched, to acknowledge their receipt within a reasonable time. Such delays are often due to the slow transit of goods by rail, or to other irremediable causes, and we think that a system of payment for goods on proof of despatch, rather than on proof of receipt, should be introduced. We desire to emphasise the point as this question of prompt payment is one to which commercial firms naturally attach great importance. We have been advised that the introduction of such a system of payment, as we advocate, is attended by serious drawbacks in connection with the closing of the government departmental accounts, but, as between Government and the suppliers, we can see no other preventative for the occurrence of delays, and we think that the possibility of inter-departmental difficulties is not a sufficient reason for its rejection. When a department is known to be generally dilatory in making payments, suppliers naturally protect themselves by making an allowance for interest in their charges ; the direct remedy lies, as we have said, in having a business-like system for the prompt payment of accounts. In exceptional cases, claims for interest, when they arise, should be considered on their merits ; it being understood that, if interest is paid in exceptional cases, this charge will be debited to the department to which the payment relates.

## CHAPTER XVI.

## COST OF THE DEPARTMENT.

204. The particulars of the proposed organisation given in Chapter XII enable a fairly approximate estimate to be framed of the annual cost of the Indian Stores Department. The figures will be reliable for the superior staff, whose numbers and pay have been prescribed, and to the total cost of which we propose to add 20 per cent. to cover leave allowances. It is more difficult to arrive at trustworthy figures in regard to subordinate staff, travelling allowances, rent and contingencies ; but we believe that the subjoined estimate is as accurate as is practicable in the circumstances. The actual expenditure will be influenced to some extent by the decision whether the headquarters of the department are to be located at Calcutta, or at a cheaper up-country station, but the aggregate cost will be so slightly affected that we do not think it necessary to attempt to estimate the difference due to this cause. As regards subordinate staff, we have adopted a figure of 60 per cent of the cost of the superior appointments ; we should explain in this connection that we were at first disposed to estimate this at a lower percentage, but enquiries as to the prevailing ratio in certain offices, suggested that the figure should be even higher. We have allowed, however, for the fact that a considerable part of the proposed superior establishment, especially on the inspection side, will be technical, and will not necessitate such a large proportion of subordinates. As a check on the percentage adopted, a rough estimate has also been made of the actual numbers of subordinates likely to be required in the several offices, and of their cost at an average of Rs. 100 per man (a rate which we believe closely approximates to the current cost of clerical establishments), and of the menial staff at an average rate of Rs. 17. The result, reproduced in paragraph 207, supports the estimate made on a 60 per cent basis.

Basis of  
estimate.

205 Departments, which purchase for themselves at present, express inability to give up any appreciable staff on account of being relieved of the work of purchasing ; the heavier connected work of preparation of demands and budgets still remains both in administrative and executive offices. The latter will retain purchasing powers within their financial limits, and the former must be kept acquainted with the particulars of supplementary indents for administrative and budget purposes. We therefore accept their views with regard to the impracticability of making any reduction in staff. On the inspection side, the Director General of Ordnance assesses the saving in his inspectorate branch, due to transfer of work to the Indian Stores Department, at Rs. 13,000 per mensem or Rs. 1,56,000 per annum. It is not possible to calculate the saving that may accrue in this respect from Railways, Posts and Telegraphs, Military Works Services, Public Works Department, etc., who have not hitherto adopted a specialised

Anticipated  
savings.

system of inspection of stores. Nevertheless we consider the saving will be considerable, and therefore have assumed, as a safe estimate, that the total reduction on account of all other departments will be equal to that of the Army, *viz.*, Rs. 1,56,000 per annum.

Accommodation.

206. It is impossible to give details concerning rent, for which we have provided a provisional sum of Rs. 2,00,000, until the headquarters of the new department are definitely decided; the following figures have been taken :—

Calcutta	..	Rs. 85,000	per annum.
Bombay	...	„ 65,000	„ „
Lahore	...	„ 15,000	„ „
Cawnpore	...	„ 15,000	„ „
Madras	...	„ 10,000	„ „
Rangoon	...	„ 10,000	„ „

This is inclusive of rent for test houses and inspection depots. In Chapter V we have recommended the abolition of the Clothing Factory at Alipore, and, assuming this proposal to be accepted, the premises vacated would be very suitable for the headquarters of the Indian Stores Department. They are within convenient distance of its two proposed subordinate establishments in Calcutta, the Test House at Alipore and the Inspection Depot at Hastings. It is presumed the latter depot will be available for this purpose, as the reason for its existence will disappear when the Indian Stores Department takes over the purchase and inspection of ordnance stores. The situation of the Hastings Depot, close to rail and river, is most convenient, but considerable extensions will be required within the depot to make it really suitable as an inspection depot for the supply of stores to so many departments. Similarly, we have suggested the transfer to the Indian Stores Department of the old Gun Carriage Factory site at Colaba, Bombay, where, also, the hire of other premises would be very expensive. At Madras, Lahore, Cawnpore and Rangoon, we anticipate no difficulty in acquiring suitable premises at reasonable rents.

Estimate of cost.

207. The estimate of cost therefore is made up as follows :—

	Rs.
(a) Superior establishment (as below) ...	8,10,460 per annum.
(b) Twenty per cent. for leave allowances ...	1,61,829 „ „
(c) Subordinate establishment at 60 per cent. on (a)...	4,86,288 „ „
(d) Twenty per cent. for leave allowances ...	97,092 „ „
(e) Rents ...	2,00,000 „ „
(f) Travelling allowances ...	1,20,000* „ „
(g) Contingencies ...	50,000* „ „
<b>GRAND TOTAL</b> ...	<b>19,25,680 „ „</b>

\*The figures for travelling allowances (Rs. 1,20,000) and contingencies (Rs. 50,000) are conjectured only, no data for their calculation being available.

Less—

(h) Present cost of Alipore Test House and the Metallurgical Inspector and staff	... 1,50,000 per annum
(i) Anticipated saving on Army, and other, Inspectorates	... 3,12,000 " "
Total saving	... 4,62,000 " "
Net annual cost	Rs. 14,63,680 " "

*Detail of superior establishment.*

	Rs.
Director General of Stores ...	3,500
Inspector General of Stores ...	3,000
Director of Contracts and Intelligence ..	2,250
Controller of Provincial Agents and Intelligence ...	1,875
Controller of Timber Purchase and Inspection ...	1,600
Controllers of Purchase (2) ...	2,800
Assistant Director General of Stores ...	1,125
Accounts Officer ..	900
Engineers, 1st grade (3) ...	3,750
Engineers, 2nd grade (1) ...	900
Chief Inspectors (2) ...	2,500
Provincial Agents (6) ...	8,400
Superintendent of Test Houses ...	1,750
Test House, Alipore ...	3,550
Test House, Bombay ...	2,650
Metallurgical Inspector ...	3,940
Inspection Depot, Calcutta ...	6,500
"    "    Madras ..	1,500
"    "    Bombay ...	5,900
"    "    Cawnpore...	2,850
"    "    Lahore ...	2,100
"    "    Rangoon ...	600
Assistant Controllers of Timber (4) ...	3,600
Total	Rs. 67,540 per mensem, or Rs. 8,10,480 per annum

The rough estimate of numbers and cost of subordinate staff, alluded to in paragraph 204 is reproduced, but with the *proviso* that it should be looked on as an approximation only and unlikely to represent the precise requirements of any one of the offices in question.

*Rough estimate of numbers and cost of subordinate staff.*

*Assistant Director General.*

Indents	...	...	...	...	16
Correspondence	...	...	...	...	10
Establishment	...	...	...	...	4
Accounts	...	}	.	...	20
Audit	...				
Bills	...				

*Director of Contracts and Intelligence.*

Bulletin	...	}	...	...	24
Home prices	..				

*Purchase.*

Leather	...	}	...	8	}	...	...	32
Textiles	...							
Timber	...	}	...	8				
Engineering, etc.	...							

*Provincial Agents.*

Calcutta	...	...	...	...	10
Bombay	...	...	...	...	8
Madras	...	...	...	...	4
Cawnpore	...	...	...	...	6
Lahore	...	...	...	...	5
Rangoon	...	...	...	...	5
Total				...	144

*Inspector General.*

Structural	...	}	...	...	20
Mechanical	...				
Electrical	...				
Leather...	...	...	...	...	4
Textiles	...	...	...	...	6
Test House, Calcutta	...	...	...	...	12
Test House, Bombay	...	...	...	...	5
Metallurgical	...	...	...	...	5

*Inspection Depots.*

Calcutta	...	...	...	...	20
Bombay	...	...	...	...	25
Madras	...	...	...	...	20
Cawnpore	...	...	...	...	20
Lahore	...	...	...	...	20
Rangoon	...	...	...	...	12

*Attached to Inspectors and Examiners.*

Timber	...	...	...	...	12
Others	...	...	...	...	25
Total				...	219

*Abstract.*

Purchase side ... 144	} at Rs. 100 (average)	
Inspection side ... 219		= Rs. 36,300 per mensem
Total ... 363		or Rs. 4,35,600 per annum.

Menial staff including	} at Rs. 17 (average)	
duftrys, chaprasies,		= Rs. 5,695 per mensem
khalasis, durwansetc. 335		or Rs. 68,340 per annum.

Grand total Rs. 5,02,940 per annum.

This figure closely approximates to that (Rs. 4,86,288) adopted under heading (c) of the estimate.

208. It will be convenient for reference, to reproduce in one paragraph the scale of salaries proposed for the principal members of the staff :—

	Rs.
Director General of Stores...	3,500
Inspector General of Stores ...	3,000
Director of Intelligence and Contracts ...	2,000—2,500
Controller of Provincial Agents and Intelligence ...	1,750—2,000
Controller of Timber Purchase and Inspection ...	1,400—1,800
Controllers of Purchase ...	1,200—1,600
Assistant Director General of Stores ...	1,000—1,250
Accounts Officer ...	800—1,000
Office Superintendents ...	350—450*
Engineers, 1st Grade ...	1,000—1,500
Engineers, 2nd grade ...	800—1,000
Engineers 3rd grade (if required) ...	600—800
Chief Inspectors ...	1,000—1,500
Assistant Chief Inspectors...	800—1,000
Examiners, 1st grade ...	700—800
Examiners, 2nd grade ...	550—650
Provincial Agents ...	1,200—1,600
Superintendent of Test Houses ...	1,500—2,000
Chemists, 1st grade ...	1,000—1,500
Chemists, 2nd grade ...	00—1,000
Chemists, 3rd grade ...	600—800
Laboratory Officers ...	600—800
Metallurgical Inspector ...	2,250
Assistant Metallurgical Inspector ...	1,000—1,270
2nd Assistant Metallurgical Inspector...	460—650
	} inclu ding fees.

NOTE.—The Office Superintendent in charge of the Bulletin and Home Prices Section of the Intelligence Branch at headquarters will draw Rs. 400—600.



Value of  
stores  
Handled.

209. Owing chiefly to the abnormal conditions set up by the war, and still prevailing, we have experienced great difficulty in arriving at any reliable figures for the value of stores likely to be handled at the commencement by the Indian Stores Department. The price of most articles, a chief factor in such a calculation, continues to be very high, and, notwithstanding the expectation of a drop in the not distant future, we feel it necessary to place it, on the average, at 100 per cent above pre-war rates. Another important factor is the quantity of stores; as regards railways a large and steady increase in demands can safely be relied upon; the question of equipment and scales for the Army is still under consideration. The war necessitated not only the introduction of many improved types of existing armaments and equipments, but also of entirely new ones; while, in some instances, the necessity of increasing scales previously considered adequate has now been accepted. The extent to which these increases can be financed is a matter on which we can form no opinion. The present era undoubtedly foreshadows large increases in expenditure by the Public Works, and the Posts and Telegraphs Departments. While, therefore, we have been unable to make any detailed calculation, we have no hesitation in anticipating a very great increase on the pre-war figures given in Table I (Appendix D). In the following estimates we have made allowance, by omission or deduction, for expenditure on account of coal, stationery, and medical stores, since the Indian Stores Department will not be concerned in purchasing the first, and, in the first instance, will deal with the two latter to a limited extent only. We have assumed that it will deal with one quarter of the stores purchased by local Governments, either in respect of inspection or purchase. With the above exceptions, the Indian Stores Department will inspect all stores, and, in addition to exercising a scrutiny over the decentralised purchases made by experts, will also furnish these experts with the data necessary for economical purchase. we have, therefore, taken the figures of expenditure in full, as follows:—

*Produce of India obtained from private dealers.*

	Rs.	Rs.
Government of India ...	5,64,000	
Local Governments ...	15,55,000	
State-worked railways ...	1,61,83,000	
Army Department ...	52,71,000	
Total ...	...	2,35,73,000
<i>Deduct on account of coal (Table III, Appendix D) allowing for Ordnance Factories, and the Eastern Bengal Railway, whose consumption is not shown in the above Table ...</i>		10,00,000
Total ...	...	2,25,73,000

*Imported stores purchased in India.*

		Rs.	Rs.
Government of India	...	4,22,000	
Local Governments	.	12,50,000	
State-worked railways	...	19,68,000	
Army Department	...	6,49,000	
<hr/>			
Total	...	...	... 42,89,000
Pre-war total	...	...	...2,68,62,000
Allow 50 per cent. for increase in demands on the average, in all departments	... ..	...	...1,84,31,000
<hr/>			
Total	...	...	4,02,93,000
Add 100 per cent. for increased cost.		...	4,02,93,000
<hr/>			
Final total	...	...	Rs. 8,05,86,000

As pointed out in Chapter II, paragraph 11, the figures in Table I err on the low side, and we have added nothing on account of increase under imported stores purchased in India, which for the reasons given in Chapter III, paragraphs 40 and 44, we anticipate will take place at once. In the matter of sleepers alone, taking into consideration the requirements of company-worked railways and the possibility that, in the hands of an efficient organisation, the supply of wooden sleepers may overtake the demand, we believe that an addition of possibly a crore of rupees may be made to our estimate. The organised purchase of the teak supply would probably attract the company-worked railways, and add largely to the business of the department. We have, therefore, confidence in believing that we have not overstated the volume of work.

210. Thus the cost of the Indian Stores Department Ratio of cost. works out to 1.8 per cent on the value of the stores handled, a figure which approximates very closely to that arrived at by the Industrial Commission in paragraph 351 of their report, although their totals, both for cost of the department and value of stores handled, are much below those arrived at by us. These differences are due partly to decentralisation, the necessity for which was foreseen by the Industrial Commission, and partly to change in conditions since their report was written.

## CHAPTER XVII.

## SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.

Introductory.

211. The following summary of our principal conclusions and recommendations is intended to provide a birds-eye view of the contents of the preceding report; we do not attempt here to review points of detail, or to recapitulate the reasons which have led up to the judgments formed, but refer the reader to the appropriate chapters and paragraphs.

## CHAPTER I.

Terms of reference.

212. The Committee was appointed, in view of the necessity of encouraging Indian industries while at the same time securing economy and efficiency, to enquire and report on the measures required to enable government departments to obtain their requirements as far as possible in India; to devise the necessary organisation; to suggest the nature of its internal and external relations; and to indicate the modifications necessary in the stores purchase rules.

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## CHAPTER II.

Scope of enquiry.

213. In the course of our enquiries, we have considered it necessary to make a comprehensive survey of the subject matter, and our investigations have, therefore, had reference to the general question of the supply of stores of all sorts for government departments, railways and *quasi*-public bodies; and have comprised a review of the conditions governing the purchase both of indigenous and of imported stores, as well as of ships.

Relative importance of imported stores.

214. Under peace conditions, imported stores form a preponderating part of the purchases, which we have reviewed. Under war conditions, the ratio between such stores and those of local origin was modified in favour of the latter, but imported stores still represented one-half of the total.

Stock depots not justified.

215. In suggesting the details of the proposed Indian Stores Department, we have decided that, in view of the great expense which would be involved without corresponding advantage, the establishment of central stock depots would not be justified.

## CHAPTER III.

Lessons from history.

216. A review of the stores purchase policy of the Government of India from the year 1862 onwards leads to two prominent conclusions:—

- (i) that the Government of India have not been generally successful in the efforts made by them, from time to time, to procure relaxations of the Stores Rules, in respect of the encouragement of local industries and of the local purchase of imported stores;
- (ii) that this failure has been contributed to largely by the influence of the Store Department of, and the Consulting Engineers to, the India Office.

217. With the establishment of an efficient department in India for the purchase and inspection of stores the time has, we consider, now come when the Secretary of State should delegate to the Government of India full control over the details of the Stores Rules. Complete freedom should be granted to India in this matter; and it should be accepted as a policy, not only in theory but also in practice, that all stores required for the public service shall be obtained in India whenever they are procurable in the local market of suitable quality and reasonable price, preference being given to articles of Indian origin.

**Stores  
policy  
recom-  
mended.**

218. We anticipate that the work devolving upon the Director General of Stores, India Office, will be reduced, and consider that his department should, in due course, be reconstituted as the London Branch of the Indian Stores Department, the status of the officer in charge becoming that of a Director, immediately subordinate to the Director General of Stores in India. As an interim measure, and pending the above development, we recommend the transfer of the existing organisation of the Director General of Stores, India Office, from the immediate control of the Secretary of State to the charge of a High Commissioner for India.

**Reconsti-  
tution  
of Store  
Depart-  
ment,  
India Off.**

#### CHAPTER IV.

219. A review of the existing methods of purchase in the several departments of the public service shows that local officials are, at present, greatly handicapped for want of information regarding, and facilities for using, existing Indian resources, owing to the absence of any central authority possessed of comprehensive knowledge, and of an organisation capable of not only placing orders but also seeing that they are properly met.

**Need for  
organi-  
sation.**

#### CHAPTER V.

220. A consideration of the existing practice of Government with regard to the maintenance of factories and departmental workshops indicates the necessity for the adoption of a more consistent policy of reliance, in ordinary cases, upon private enterprise, although we recognise that government factories may properly be retained in some cases on grounds of convenience, and, in others, of expediency. We question the validity of the argument sometimes advanced as to the relative economy of government factories; but, even if this could be substantiated, we do not think that it should determine the decision of Government. Some of the existing factories could, in pursuance of the above policy, be either reduced in scope, or altogether abolished.

**Govern-  
ment  
factories.**

#### CHAPTER VI

221. In view of the tenor of the Reforms Act, we consider that local Governments should, in future, be free to deal, as they wish, with purchases of stores, of indigenous origin or local manufacture, for their own requirements. Having regard however to the influence which the adoption of a sound policy, in respect of the methods by which imported stores are procured, may be

**Position  
of  
local  
Govern-  
ments.**

expected to have upon the industrial development of India, we consider that the purchase of imported stores should continue to be controlled by the Government of India, so far as regards policy though not as regards the precise mechanism utilised. Local Governments should not be bound to utilise the agency of the Indian Stores Department, though they would be free to use it if they so desire; and we have provided special facilities to enable them to do so.

Position of  
company-  
worked  
railways  
and other  
bodies.

222. Companies, which work government railways, are free agents as regards purchase of stores. Under their existing contracts, they could not be compelled to conform to the policy approved by Government, nor to utilise the Indian Stores Department, though it is hoped that they will generally do so. We suggest that, when new working contracts are framed, opportunity should be taken to require the railway companies to conform to the Government of India system and procedure. Indian Native States and *quasi*-public bodies, such as municipalities, should be free to utilise the services of the new department subject to a reasonable payment.

## CHAPTER VII.

Present  
policy  
barren of  
result.

223. As regards stores of Indian origin, the principal ground for complaint at present is, that the expressed policy of Government in favour of the purchase, by preference, of such stores, rather than of imported articles, is defeated by the prevailing lack of information, amongst government officers, of the available resources of the country; by the difficulty they experience in making the close comparison of price now required; and by their defective equipment for making use even of such resources as are within their knowledge. The result is that officers are induced to adopt the line of least resistance, and to obtain stores of extraneous origin when, with better facilities, they might obtain instead suitable goods of Indian manufacture. This reacts prejudicially on the development of Indian industries, and on the economy and convenience of the public service.

The remedy  
an Indian  
Stores De-  
partment.

224. The remedy is to be found in the establishment of an expert purchasing agency in India, equipped with facilities for knowing the manufacturing resources throughout the country; able to purchase efficiently in the various markets of India; and competent to carry out such inspection as may be necessary. The Indian Stores Department, the establishment of which is thus indicated, must have authority and facilities to ensure that orders shall, in accordance with the accepted policy of Government, be placed in India for goods of local production whenever possible, and that imported stores shall only be purchased when suitable Indian goods are not procurable.

Assistance  
for Indian  
industries.

225. We consider that, in addition to providing in this manner for the full utilisation of existing industries in India, Government must further give them practical encouragement, especially in the initial stages of their enterprise, and must assure them of a reasonable measure of protection against outside competition. The measures advocated by us, subject to appropriate

restrictions and safeguards, are :—

- (i) guarantee of orders for a limited period ;
- (ii) placing of orders at favourable rates for a limited period ;
- (iii) favourable railway rates ;
- (iv) revision of the fiscal policy of Government, with a view to the protection of local industries ;
- (v) adoption of a conventional rate of exchange in effecting comparisons between prices quoted for indigenous and imported goods of the same class.

We consider that the conditions under which contracts are placed in India should be assimilated to those attaching to contracts entered into by the Director General of Stores, India Office, which at present are in some respects more favourable to the British manufacturer.

#### CHAPTER VIII.

226. The purchase of such stores as are not procurable of local manufacture is, at present, regulated artificially by rules, the effect of which is practically to prevent, in ordinary cases, such stores being purchased in India from dealers or others. We agree that the time has come when such artificial restrictions should be abolished, and that it should be open to officers responsible for the purchase of imported stores to take advantage of the cheapest available market in which suitable articles can be obtained, having due regard to the convenience of rapid supply and other special advantages. The several channels through which these stores might be purchased should thus be free to compete with each other on their merits. We anticipate that, in practice, it will be found advantageous to procure certain classes of imported stores considerably more freely than hitherto through the agency of branches, agents and dealers in India. The demands placed on London will thus be reduced in two distinct ways :—

- (i) by the interception of demands for imported stores for which articles of Indian manufacture can be substituted, and
- (ii) by the increasing purchase of imported stores in India instead of in the United Kingdom.

#### CHAPTER IX.

227. Efficient arrangements for inspection are of great importance; it is on the distinct understanding that all stores purchased will be subject to examination, either during manufacture or before acceptance, that our main recommendations are based. In view of the intention that the Indian Stores Department should act as an instrument for the development of Indian industries, its inspection staff will be responsible, not merely for the detection of faults but also

**Imported  
stores—  
removal of  
restrictions.**

**Importance  
of  
inspection**

for indicating to suppliers the steps necessary to improve the standard of their manufactures, and for the introduction of standardization of all articles in general use.

**Inspection  
Depots.**

228. We recommend the institution of inspection depots at suitable centres to facilitate the examination of certain classes of goods. At each depot a pattern room should be maintained.

**Absorption  
of existing  
staffs.**

229. A portion of the existing ordnance inspection staff should ultimately be absorbed, and, because of the conditions attaching to the use of military stores, certain military officers should be deputed from the Army for employment as liaison officers with the Indian Stores Department. The inspection branch of the department should absorb the existing staff of the Metallurgical Inspector, Jamshedpur, and the Inspection and Test House staff at Alipore. A test house should also be established in Bombay.

CHAPTER X.

**Shipbuilding.**

230. For the encouraging of shipbuilding, we recommend the liberalisation of the existing rules governing the supply of ships for the public service, with a view of utilising the capacity of Indian shipyards, and of promoting their development.

CHAPTER XI.

**Stores  
Rules  
revised.**

231. Having regard to the relaxations which will be desirable with the alteration in conditions in India in future, and to the complicated nature of the existing rules governing the purchase of stores for the public service, we have recast the rules with special attention to the provision of a clear enunciation of the policy of Government; to making effective the intention of giving all reasonable preference to the products of Indian industry; to the substitution, for existing arbitrary restrictions, of a more businesslike latitude in regard to the channel of supply of goods of foreign origin; and to the exercise of judgment in the comparison of competitive tenders.

CHAPTER XII.

**Organisation.**

232. We have set out the details of the organisation which we propose for the Indian Stores Department, both in its initial and ultimate form, and have indicated the range and nature of the duties of the staff to be employed in the several sections on both the purchase and inspection sides. The organisation set forth provides for a headquarters staff, divided into purchase and intelligence and inspection branches and a general office, assisted by provincial agents and inspectors at the chief centres of industry. The provincial agents will provide special facilities for meeting the wishes of local Governments in regard to supply of stores, and will act as intelligence agents of the Indian Stores Department in close collaboration with the provincial Directors of Industries. We have laid down the extent to which the use of the Indian Stores Department should be compulsory, and that to which it should be

optional for the several departments of Government and others concerned.

### CHAPTER XIII.

233. For the convenience of the various authorities interested, we have set forth in some detail the procedure, which we contemplate should be adopted, both by the departments which utilize the Indian Stores Department, and by the department itself in dealing with the demands preferred upon it.

Procedure.

### CHAPTER XIV.

234. In the important matter of recruitment we have indicated the qualifications to be looked for in the several members of the staff whose employment we think necessary, and the sources from which they should be obtained. While indicating that, at the commencement, expediency must be the principal guide in selecting officials of suitable experience to fill the various posts, we make it clear that, once the department is fairly established, it will generally be advisable, at least on the administrative side, to engage only junior men in each branch, and to fill vacancies by promotion. We recommend that, whenever suitably qualified men can be obtained in India to fill vacancies, preference shall be given to statutory natives of India.

Recruitment.

235. The question of interchange of staff between the Indian and English establishments is specially dealt with, and, in this connection, we have drawn attention to the advantage to be expected from the transfer of some of the experienced establishment of the India Office Store Department to fill some of the new appointments in India.

Interchange of staff.

### CHAPTER XV.

236. We contemplate close association between the officer of the Finance Department in charge of the Accounts Section and the headquarters officers, and branches of the Indian Stores Department; and we lay stress upon the importance of this connection, with a view to the prevention of delays in payments of bills for stores supplied, and to the avoidance of friction. We contemplate that bills shall be paid from headquarters, and that debits shall be transmitted by the Accounts Section to the departments concerned. Particular attention is invited to the necessity for the observance of ordinary commercial practice in respect of the prompt settlement of accounts.

Financial arrangements.

### CHAPTER XVI.

237. The details set out by us show that the additional net annual cost of the Indian Stores Department may be estimated at Rs. 14,60,000, a figure which, though considerable in itself, is relatively small, and represents only about two per cent. of the value of the stores, which we anticipate will be handled each year. The estimates, particularly of the volume of stores to

Cost of the scheme.



be dealt with, are unavoidably speculative ; but even if the ratio of the cost of the department to the value of stores handled should prove to be appreciably higher than we anticipate, it is still very unlikely that it will reach an unreasonable figure.

(Signed) F. D. COUCHMAN,

*President.*

„ A. W. DODS.

„ C. O. H. HOGG.

„ H. A. K. JENNINGS.

„ LALJI NARANJI.

„ MILKI RAM.

„ T. RYAN.\*

(Signed) J. C. HIGGET,

*Secretary.*

*Simla, the 19th July 1920.*

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\* Subject to the contents of the attached memorandum.

JOINT MEMORANDUM BY MESSRS. COLLIER  
AND RYAN.

SECTION I.

INTRODUCTORY.

Though we are in full agreement with some of the most important recommendations which are being submitted to Government by the Stores Purchase Committee, we find ourselves at variance with them on certain matters which are also of considerable moment; and, as the influence of this permeates the main report, we have decided, rather than ask our colleagues to confuse the thread of their argument by introducing our divergent opinions from place to place, to embody our views in this self-contained statement. This has become in fact necessary owing to the circumstance that one of us (Mr. Collier) finds himself constrained by his other duties to leave the Committee a short time before the main report will be fully drafted. The questions involved in the work of the Committee have, however, been fully discussed and arrangements have been made to ensure that the scope of this memorandum, as finally printed, will be limited to those points on which our views differ in important respects from those recorded by the majority of the Committee.

2. Mr. Collier has been associated with the Committee practically throughout its proceedings; Mr. Ryan was appointed to it at a late stage of its discussions in response to a request for Mr. Heseltine's replacement.

SECTION II.

EXTENT OF OUR AGREEMENT AND DISAGREEMENT WITH  
THE MAJORITY.

3. We desire in the first place to make clear the extent to which we are able to endorse the views of our colleagues; the respects in which, differing from them, we think they have strayed from the matters in issue; and the subjects in regard to which we have not been able fully to agree with them.

4. We observe that the Committee's report contains in sequence the following matter; (the figures in brackets correspond to the chapters of the Committee's report) :—

(I) *An introductory chapter.*—We have no comments to make on this.

(II) *A review of the subject matter and scope of the enquiry.*—It will be evident from our later remarks that in our opinion the main purpose for which the Committee was appointed is to work out a detailed scheme for an expert purchasing and inspecting agency in India for the purchase of supplies for the public services, in order not only to ensure that such purchases shall be made with economy and efficiency but also to carry out effectually the principle already embodied in the Stores Rules that articles should not be imported which can be supplied by manufacturers in India equally well both in respect of price and quality. Thus we should regard

it as of essential importance to secure that, for instance, imported glassware should not be purchased through any channel while glassware made in India might equally well be bought instead. We do not, however, consider that the establishment of an expert purchasing and inspecting agency in India would necessitate or justify any fundamental change in the policy laid down in the Stores Rules regarding the purchase of imported stores, which is founded on well-considered principles of economy and efficiency. Nevertheless we do not feel ourselves to be debarred from making such recommendations as we think suitable regarding the methods of purchase of imported stores, and the consequent alterations in the Stores Rules, so long as these are likely to advance the purpose which the Committee was appointed to develop, and are treated as supplementary to the principal questions before us.

(III) *A history of stores policy.*—It follows from our preceding remarks that we regard the labour and research expended by our colleagues on this subject as being largely misdirected in the circumstances of this Committee's appointment. We have not made an independent review of the subject matter dealt with in this historical retrospect and cannot therefore either criticise it in detail or indicate any actual omissions; but we feel bound to say that the impression left by it upon our minds is that it presents the case, if not in a wrong light, at least in misleading perspective. In particular we consider it obvious that if a more progressive stores purchase policy has not hitherto been pursued by Government the defect is due as much, or more, to the non-existence in India of any organisation suitable for carrying such a policy into practice, as to any undue conservatism on the part of the technical advisers of the Secretary of State for India. Our colleagues have indeed alluded to this factor, but in our estimation they have assigned to it much less than its due weight, both in the portion of their report now specially mentioned, and in their anxiety to subordinate the stores agency in London to the proposed Stores Department in India.

(IV) *A review of the existing methods of purchase in the several departments.*—No remarks.

(V) *A discussion of the policy underlying the maintenance of government factories and railway workshops.*—We are in agreement with the observations of our colleagues.

(VI) *A note on the relations of the proposed Stores Department with local Governments and quasi-public bodies.*—We agree with the observations of the majority.

(VII) *A note regarding the purchase of such indigenous stores as can fairly compete with imported goods.*—We are in general agreement with the conclusions of our colleagues, and go farther than we understand some of them do in that we definitely regard this portion of the report, together with the concrete recommendations subsequently made for carrying into effect the policy advocated, as the essential and most important part of the Committee's work.

(VIII) *A note on the purchase of imported stores.*—For the reasons already indicated, and developed more fully in Section III of this memorandum, we cannot agree with the conclusions arrived at by our colleagues. We are, on the contrary, of the opinion recorded by the Indian Industrial Commission, in paragraph 194 of their report, that: “the prescriptions of the Stores Rules regarding the classes of articles that may be bought in India are suitable, subject to the addition of a provision \* \* \* regarding purchases from Indian branches of British manufacturing firms.”

(IX) *A note on the question of inspection.*—We are in general agreement with the Committee.

(X) *A chapter regarding shipbuilding.*—We agree with the Committee.

(XI) *Proposed alterations in the Stores Rules.*—It follows from our remarks under sub-heads (II), (III) and (VIII) above, and the fuller discussion in Section III below, that we must regard as uncalled for the extensive changes in the Stores Rules, proposed by our colleagues. We agree that minor changes are desirable and have embodied these in the redraft of the existing rules which appears in Section IV of this memorandum.

(XII)-(XV) *Detailed proposals for the organisation of the India Store Department and its functions.*—We are in general agreement with the recommendations made as to the organisation of the Department and (except in regard to the handling of imported stores) as regards its functions.

5. We proceed in the following sections to explain more fully our views in regard to the points in which we have expressed disagreement with the Committee. We may observe here that in these draft rules and in the following portion of this memorandum we have retained the designation “Director General of Stores” for the head of the Store Department in London, as at present, and have used the designation “Controller General of Stores, India” for the head of the proposed new organisation in India. We think that this would be less likely to cause confusion than to designate the latter officer “Director General of Stores” as proposed by our colleagues: their objection to the title Controller General is, we understand, based on the fear that Army officers in particular might confuse the two “C. G. Ss.” (since officials are commonly referred to by their initials). We think that the functions of the Chief of the General Staff and of the Controller General of Stores are so different that confusion is unlikely to occur in practice. In any case it will make the intention of our present remarks clearer if in this note we maintain the designation preferred by us.

### SECTION III.

#### PURCHASE OF IMPORTED STORES.

6. We have very carefully considered the recommendations of our colleagues in regard to the methods to

be adopted in future for the purchase of imported stores. Their proposals involve the entire remodelling of the Stores Rules, the prescriptions of which the Industrial Commission considered to be suitable subject to the addition of a provision regarding purchases from Indian branches of British manufacturing firms. We do not believe that the radical changes in those Rules which are recommended by our colleagues are needed to secure the objects aimed at by the Industrial Commission, namely the establishment of an expert purchasing and inspecting organisation in India for procuring supplies required for the public service, and for preventing demands being sent to England which might be satisfactorily met by articles of Indian manufacture. We go further and are strongly of opinion that to invest the head of the new Stores Department in India, as proposed by our colleagues, with power to purchase through his subordinates imported stores from merchants or middlemen at his discretion, would certainly not be productive of economy, might be liable to serious abuse, and would lead to a great increase of work and delay in dealing with demands. At best it could hardly fail that vain endeavours would be made to obtain quotation in India for imported stores which it would be found after all, for the reasons stated below, could be obtained more cheaply and probably of better quality through the Home agency. We therefore consider that unless demands for imported stores can be satisfactorily met by the substitution of articles of local manufacture, or by purchase from Indian branches of British manufacturing firms, or otherwise subject to the prescriptions of the amended Stores Rules which we recommend (see Section IV following) the demand should at once be passed to the Home agency for compliance.

7. In connection with this question of buying imported stores, we have carefully considered the terms of reference to the Committee. It is reasonable to assume that these terms must be read in conjunction with, and be interpreted in the light of, the Resolution of Government with which they are promulgated; as well as with the principles which were set forth by the Indian Industrial Commission, accepted by the Government of India, and approved by the Secretary of State: it must be remembered in this connection that our Committee was appointed strictly in pursuance of the recommendations of the Industrial Commission, the views of which are thus of peculiar relevance. After carefully weighing these considerations we are satisfied that there can be no reasonable doubt that any general discussion of the stores policy of Government is not within the scope of the terms of reference and indeed is expressly excluded therefrom. Assuming, however, that this were not the case we observe from the History of the Stores Rules attached to the report (Appendix B) that the Rules themselves have received most careful consideration from the Government of India, and various Secretaries of State from time to time over a long course of years. One of the guiding principles which has been continually kept in mind in their preparation and development has been that Indian products and manufactured articles should be utilised to meet the requirements of

the public services in so far as such products and manufactured articles can be obtained of suitable quality and at a reasonable price. It is this principle which the establishment of the stores purchasing agency in India is designed to make more effective and to safeguard, and it is this principle which has been brought specially to the notice of the Committee. It is in our opinion unreasonable to suppose that, in the absence of any instructions to that effect, the Stores Purchase Committee should take upon itself to recommend radical changes in rules which have been deliberately adopted by the highest authorities after full and careful consideration. Nevertheless while holding this opinion we have considered it proper to deal specifically with the one point mentioned by the Industrial Commission (purchase through branch firms) as requiring an amendment of the Stores Rules, and to suggest such minor alterations therein as seem to be desirable under present conditions, and to be necessary in view of the proposed establishment of a Stores Department in India. Our recommendations will be found in Section IV of this memorandum dealing with the Stores Rules.

8. In spite of what we have said above to the effect that no radical alteration of the Stores Rules is called for, we think it well to offer some further remarks on this question of purchasing imported stores because some witnesses, particularly representatives of Chambers of Commerce and merchants, have advocated that all imported stores should be purchased in India, either through branches or agents of the manufacturers or through merchants; and because some witnesses have also recommended that the Stores Agency at Home for the supply of imported stores (which has hitherto been the Store Department of the India Office) should be abolished. If all, or the bulk of, imported stores were to be purchased in India it is evident that the Stores Agency at Home would no longer be required, or at least that it might be very greatly reduced in size. The India Office Store Department Office was initiated nearly 60 years ago. Its organisation has been built up as the result of an accumulated experience of many years and it is equipped with a well trained purchasing and inspecting staff. In regard to some, and particularly to railway engineering, stores it is advised by an eminent firm of Consulting Engineers and as regards shipbuilding, etc., by a Naval Architect of high repute. There is, therefore, a strong '*a priori*' argument against abolishing the Department and losing the services of the experienced staff employed therein or connected therewith.

9. It has also been maintained by some witnesses that the local purchase of imported articles through merchants would tend to the industrial development of India on the ground that trade precedes industry and we believe that this view has greatly influenced several of our colleagues. We are not impressed with this argument and some at least both of the European and Indian witnesses have questioned its soundness. The stores will be imported into this country whether purchased from merchants or through the Home agency and the volume of trade is not affected whichever method is adopted. The manufacturers at Home are already

aware that the supplies ordered by the Store Department of the India Office are destined for India, and if they think it worth while will arrange to establish branches of their manufactures in the country. The merchant on the contrary, in so far as he is an importer and not a manufacturer, will not be interested in promoting manufacture in India; indeed his interests will be decidedly opposed to this seeing that he would thereby be liable to lose his business as an importer and the profits attaching thereto. It will be for the Directors of Industries, assisted by the Stores Department in India, to bring the requirements of Government to the notice of actual or potential manufacturers in the country.

10. The cost of imported stores purchased through merchants in India must include the profits of the middleman in addition to the actual expense of handling the order. The latter may be taken to correspond with the departmental cost of the India Store Department in London, but seeing that the Department deals almost entirely with actual manufacturers the profit must become an extra charge on the revenues of India. The freight rates and conditions obtained by the Department are, we understand, owing to its large business, much more favourable than can be obtained by the trade. Private firms also insure their consignments whereas the India Office does not but is its own insurer and thus saves the profits of the insurance companies on its consignments. The tonnage shipped by the Department averaged in pre-war years about 250,000 to 300,000 tons a year, and the value of the stores then supplied was roughly about £4,000,000 to £5,000,000 a year, so that the savings under both these heads may be taken to represent a considerable sum of money. On general grounds therefore it may reasonably be presumed that to procure imported stores through merchants in India must be more expensive than obtaining them through the Store Department in England.

11. Apart, however, from considerations of economy a very serious objection to placing orders for imported stores with merchants in India lies in the fact that generally speaking inspection can only be carried out after the articles have arrived in the country. This may not be till several months after the order has been placed and it is then a great temptation to the indenting officer to accept the stores, even if not up to standard, rather than incur the delay involved in their rejection, and it is also a great temptation to the contractor to endeavour by any means in his power to get the stores passed rather than have them left on his hands after incurring the expense of getting them out. This objection does not apply to stores already in the country, for the indenting officer is free to accept them or not as he pleases and no time has been lost; nor does it apply to any great extent in the case of many items of standard plant and machinery supplied by branches of British manufacturing firms of repute, especially in view of the fact that inspection of the stores by the Home agency during manufacture or before shipment could in such a case generally be provided for. It applies in a less degree to articles which are already on their way out to India, for in that case the importer has evidently thought it worth while to import the goods

as an ordinary commercial venture and will not therefore be much worse off even if the indenting officer rejects them, and not so much time will have been lost.

12. We therefore consider that from the point of view of efficiency as well as of economy it is not as a general rule desirable to purchase imported stores in the country, but cases will arise when exception should be made to this general rule and particularly in regard to stores actually in the country and to plant and machinery supplied by branches of British manufacturing firms. This opinion accords with the recommendation of the Public Works Department Reorganisation Committee; and in confirmation of it, it may also be well to quote from paragraph 3 of Despatch from the Government of India (Commerce and Industry Department) to the Secretary of State, No. 50, dated 25th August 1913, urging that the Stores Rules should be amended to allow of the purchase of plant and machinery under certain conditions from Indian branches of British manufacturing firms. The passage referred to is as follows:—

“We believe, however, that sufficient emphasis was not laid upon a condition to which the Committee\* referred in paragraphs 47 and 48 of their report, namely, that such purchases should be permitted, not from agents or middlemen, but only from Indian branches of the best English firms. This is a condition of primary importance and is one on which we desire to lay considerable stress. We admit that, had draft rule No. 5 been accepted as it stood the purchase of imported articles through agents might have been encouraged with harmful results. It is obvious that all possible steps should be taken to discourage the purchase of imported stores the price of which includes middlemen's profits but the purchase of imported stores through or from Indian branches of recognised manufacturing firms stands upon an entirely different footing.”

13. On the other hand, we hold the opinion that when imported stores are actually in the country (and not merely said to be here), purchase should be made locally when their price and quality compares not unfavourably with that at which similar stores can be obtained through the Home agency after making the necessary allowances for transit charges, etc.; and in cases of urgency we see no serious objection to local purchase when the stores are already on their way out, if the same conditions as to price and quality can be satisfied. But in all such cases unless accurate comparison of quality and price is made before purchase is effected in India it is obvious that much money might be unconsciously wasted because even a trifling difference in the quality or cost of each article may mean a large extra expenditure in the aggregate.

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\* Stores Committee Report, dated 2nd July 1906.



14. The majority of government officers qualified to give an authoritative opinion state that the articles obtained through the India Office can be safely depended on for quality, and there is much evidence to show that generally they cost less than similar articles bought in the country. On the other hand, complaints of the time taken in obtaining requirements by indent from Home are numerous. That delay should have occurred during and since the war is not surprising. In normal times we understand that delays are mainly attributable to the failure of contractors to carry out their promises of delivery. A good deal of time is sometimes occupied in India between the date when the indent is made out by the indenting officer and the date when it is actually sent Home. But whatever may be the explanation we do not disguise from ourselves the fact that the delay involved, and also the difficulty which is sometimes felt in explaining the requirements to an organisation some 6,000 miles away, may sometimes cause inconvenience which will tend to diminish or even counterbalance in some cases the advantage obtained in price. Nevertheless, the views obtained from the largest government purchasers of imported articles such as the State-worked Railways, Army Department, Royal Indian Marine, Posts and Telegraphs, Stationery and Printing, although in favour of giving greater discretionary powers than are at present allowed to purchasing officers, do not indicate a desire for any drastic change in the existing system.

15. On the grounds, therefore, of economy and efficiency, we have no hesitation in saying that in our opinion it would be a mistake to attempt to do without the Store Department in England, as the main agency for the supply of imported stores. We anticipate that the decision to place the Department under the control of the Government of India (whether through a High Commissioner responsible to, and under the orders of, the Government of India, or through some other administration), should remove the political objections which are held against the present system.

#### SECTION IV.

##### ALTERATIONS TO THE STORES RULES.

16. The Stores Rules, as they at present stand, are reproduced in Appendix C to the Committee's report. We have stated that in our opinion it is not necessary, and would be dangerous, to alter these rules so radically as has been proposed by our colleagues in Chapter XI of the main report; but we have explained in the preceding section that we are in favour of making provision for purchases of certain kinds from Indian branches of British manufacturers, as well as of making certain minor alterations in the rules. We now reproduce the rules as a whole in the form in which we recommend they should be re-issued. The places in which they

differ from the existing rules are indicated in the following table:—

Existing rule.	Proposed rule.	Nature of alteration, etc.
Preamble	Preamble	Redrafted so as to express the policy more clearly.
No. 1	No. 1	Unchanged.
" 2	" 2	Slight modifications only.
" 3	" 3	Subhead (a) expanded. " (c) provides for purchases from branch firms.
" 4	" 4	Unchanged.
" 5	" 5	Slightly relaxed. <i>N. B.</i> —The Controller General of Stores, India, will have full powers under Rule 11.
" 6	" 6	Unchanged.
" 7	" 7	Slight modification only.
" 8	...	Dropped.
" 9	...	Dropped.
" 10	" 8	Slight changes in sub-rules (i), (iii) and (iv) (a).
" 11	" 9	Unchanged.
" 12	" 10	Slight modification only.
" 13	" 11	Provision is made for the Controller General of Stores, India, with full powers. The list of powers generally has been simplified by substituting one for two sets of limits, and made more liberal by considerably increasing the existing figures.
" 14	" 12	The limit is raised.
Appendices	Appendices	Unchanged.

#### PROPOSED RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE.

##### *General Note.*

Endeavour should be made to meet all requirements by supplies of indigenous products or local manufacture so far as this can be done consistently with economy and efficiency. Subject to this provision and to any instructions regarding specific articles which have been, or may be, issued by the Government of India from time to time (*e.g.*, those relating

to the supply of stationery) the following are the rules relating to the supply of articles for the public service. These rules supersede all previous orders which are not explicitly continued.

**Rule 1.—Articles manufactured in India from Indian materials—**

All articles which are produced in India in the form of raw material, or are manufactured in India from materials produced in India, should, by preference, be purchased locally, provided that the quality is sufficiently good for the purpose, and the price not unfavourable.

**Rule 2.—Articles manufactured in India from imported materials—**

All articles wholly or partly manufactured in India from imported materials should, by preference, be purchased in India subject, however, to the following conditions:—

- (a) That a substantial part of the process of manufacture of the articles purchased has been performed in India.
- (b) That the price is as low as that at which articles of similar quality can be obtained through the Store Department, London.
- (c) That the materials employed are subjected to such inspection and tests as may be prescribed by the Government of India.

**NOTE.**—The term "a substantial part of the process of manufacture" in clause (a) means that a substantial part of the preparation of the finished article must be performed in India, whether from raw materials or from component parts obtained in a finished state from other sources.

**Rule 3.—Articles which are not manufactured in India—**

Articles which are not manufactured in India should be obtained by indent upon the Store Department, London, except in the following cases:—

- (a) When the articles are already in India at the time of order, and their price and quality are not unfavourable as compared with those at which similar articles could be obtained through the Store Department, London, and the cost of the supply does not exceed the limits prescribed in Rule 11. When the articles are required in trifling quantities it may generally be considered more economical to purchase them locally, if practicable, than to indent for them.

**NOTE.**—Articles of clothing and equipment of European manufacture required for the Burma Police Department may be procured for the present without the intervention of the India Office.

(b) In the case of important construction works let out on contract, articles not manufactured in India required for the construction of such works may be supplied by the contracting firm subject to the following conditions :—

(i) That the firm is approved by the Government of India and is included in the list of firms so approved.

(ii) That the materials are subject to the current specifications and tests prescribed by the Government of India.

(c) Plant and machinery and component parts thereof may be purchased from branches\* established in India of British manufacturing firms borne on the list of the Store Department, London, and approved by the Controller General of Stores, India, provided that the following conditions are observed :—

(i) That the purchase is made by the Controller General of Stores, India, or by a highly qualified engineer directly responsible to the Government of India or the local Government concerned for the order so placed.

(ii) That the plant and machinery are of standard patterns such as are ordinarily and actually manufactured by the firm.

(iii) That the branch firm entertains a staff of expert mechanics capable when so required of erecting and repairing the plant and machinery which it supplies.

(iv) That the actual price of the articles (exclusive of any expenditure representing cost of erection) is as low as that at which articles of the same make can be supplied by the Store Department, London.

(v) That the cost of supply under any one order or detailed estimate, in respect of any one type of standard plant or machinery, does not exceed Rs. 20,000.

(N. B.—Care must be taken to prevent orders being split up in such a way as to evade the intention of this condition.)

(vi) That when test or inspection of the plant or machinery during manufacture or before shipment is necessary or desirable arrangements should be made for such test and inspection to be carried out by the Store Department, London.

\* Branches may be held to cover approved technical agents of British manufacturers which do not merely act as selling agents but are also in a position to render the same kind of technical assistance in India, as actual branches of the firms.

Rule 4.—*Articles which should be purchased in India.*—

The following articles, whether manufactured or produced in India or not, should be purchased in India, provided that they comply with the current specifications, are of the requisite quality, and can be obtained at a not unfavourable price :—

- (a) Those of a perishable nature.
- (b) Explosives.
- (c) Block tin.
- (d) Wines and spirits and English bottled beer for the use of government hospitals in India.
- (e) Kerosine oil.
- (f) Plant and materials for electric installations intended to take current from existing centres; and small electrical power and lighting plants of not more than 25 kilowatt capacity, which involve the provision of generators and cables for distribution, provided they comply with the current specifications, and tests prescribed by the Store Department of the India Office.
- (g) Australian timber.
- (h) Australian copper.
- (i) Italian marble.
- (j) British Columbian timber.
- (k) Plant and materials for small gas installations the cost of which does not exceed Rs. 15,000.
- (l) Cheap articles of common use required in small quantities only.
- (m) Such other classes of articles as may from time to time be prescribed by the Government of India.

All such cases should be reported to the Secretary of State for his information.

Rule 5.—*Special purchases in India* —

In cases of urgency or when inconvenience to the public service would be caused by waiting to obtain an article from England through the Director General of Stores, or when, owing to the greater promptitude of supply, an economy can be effected by purchasing in India articles which, under the foregoing rules, should be obtained through that officer, the purchase may be made in India, subject to the limits prescribed in Rule 11, provided that the articles are in India at the time of order or are already on their way out. In such cases, if the value of the articles exceeds Rs. 1,500 the sanctioning officer should place

on record the reasons which make the local purchase desirable. This record shall be available for the inspection of the Examiner of Accounts or the supervising officer when required.

Rule 6.—*Inter-departmental purchases.*—

Nothing in the rules is to be deemed to prohibit the purchase of stores of European manufacture by one department or railway from another.

Rule 7.—*Method of obtaining stores not purchased in India.*—

All articles which, under the foregoing rules, are not to be bought in India, should be obtained by indent on the Store Department, London, except any which the Secretary of State may have specially authorised the Government of India or its officers to purchase direct outside India. Such purchase is at present permissible in the case of the following articles :—

- (i) Seeds.
- (ii) Cinchona bark.
- (iii) Articles for experimental or research purposes required by officers approved by the Government of India from time to time. A list of the officers thus approved is given in Appendix A.
- (iv) Excise instruments and apparatus required by provincial Excise Departments for experimental or research purposes.
- (v) China, glass, cutlery, plate, crockery and perishable fabrics, including linen for residences which are furnished by Government.
- (vi) Australian timber.
- (vii) British Columbian timber.
- (viii) Australian lead.
- (ix) Such articles as Superintendents of Vaccine Depots may require for the preparation of vaccine lymph (*e. g.* lanoline and glycerine).
- (x) Chemicals and scientific instruments which do not require careful inspection and testing or which are of standard description usually quoted by well-known firms, provided that the articles cannot be procured from the Medical Store Depots.
- (xi) Articles required for Viceregal residences in special and urgent cases.

NOTE.—Payments for stores purchased under this rule should be made direct to the suppliers by the purchasing officers.

**Rule 8.—*Method of comparing prices.*—**

In all cases in which the selection of source of supply depends upon comparison of prices, the procedure to be adopted for such a comparison is as follows:—

- (i) A reference should be made to Home prices notified continually by the Director General of Stores, London, to the Controller General of Stores, India, or as otherwise ascertained, and freight should be added at the current rates paid by the Store Department, London, together with 13s. 4d. per 100l. for interest, 2s. 2d. per 100l. for insurance, and 3d. per ton for freight brokerage.
- (ii) In cases of important contracts, the prices ruling in the English market should be ascertained by telegraphic reference to the Director General of Stores.
- (iii) In cases where the necessary information as to Home prices is not available the purchase in India shall be subject to the condition that the price is not unfavourable.
- (iv) In order to arrive at the market value at an Indian port of the article imported from England the following charges shall be included:—
  - (a) Landing, wharfage, and port charges.
  - (b) Customs duty, as shown in the tariff to be applicable to the article in question, to be calculated on its cost *plus* the additional charges mentioned in the earlier part of this rule.
- (v) The cost of carriage to site from port or place of manufacture, as the case may be, shall be taken into account.

**Rule 9.—*Tests.*—**

Any articles purchased in India which should be tested are liable to the specifications laid down from time to time by competent authority, with the approval of the Government of India, and should be required to pass the tests prescribed for such articles.

**Rule 10.—*Firms from which iron and steel may be bought in India.*—**

Important iron and steel work, if purchased in India, should only be obtained from firms approved by the Controller General of Stores and entered in a Schedule as corrected from time to time by that officer. A list of approved firms is given in Appendix B.

**NOTE.**—By “important iron or steel work” are meant articles of iron or steel which form important components of the project in hand, e.g., bridge girders and roof trusses, built up in the firm's workshops and supplied, ready for erection, in such sections as may be convenient, and rolled steel beams, rails or other sections cut to length or otherwise prepared at the firm's workshops to suit the indenting officer's requirements. The intention of the rule is to ensure that part, the accurate preparation of which is essential to the security of a project, shall be obtained only from firms which possess workshops and appliances capable of turning out work of the desired standard. The raw materials used may be either imported or of Indian manufacture, subject to the usual specifications.

**Rule 11.—Financial limits on powers of officers to make purchases in India.—**

In the case of purchases made under Rules 1, 2 and 4, an officer's powers of purchase extend to the ordinary limits to which he is empowered to enter into contracts: but in the case of purchases made in India under Rules 3(a) and 5, the limits for expenditure on any one article or on any number of similar articles purchased at one time are as follows:—

*(a) Civil Departments.*

	Rs.
(i) Heads of Departments, Commissioners of Divisions, other officers of or above the rank of Collector whom the Local Government may select, and Principals of Colleges and Inspectors of Schools in Bengal, Bihar and Orissa and Assam ... ..	500
(ii) Other officers authorised to incur expenditure	100
(iii) Controller of Printing, Stationery and Stamps	2,000
(iv) Local Government or Administration ... ..	Full powers.

The powers of a Local Government are also exercised by the following officers:—

Surveyor General of India.

Agricultural Adviser to the Government of India and Director of the Agricultural Research Institute, Pusa.

Director-General of Observatories.

Director-General, Posts and Telegraphs.

Political Resident, Persian Gulf.

Superintendent of Port Blair.

*(b) Public Works Department.*

	Rs.
(i) Executive or Assistant Engineer holding charge of a Division ... ..	1,000
(ii) Superintending Engineer or Superintendent of Works ... ..	5,000
(iii) Local Government or Administration ... ..	Full powers.

*(c) Railway Department.*

(i) Executive or Assistant Engineer holding charge of a Division on a line under construction or survey ... ..	1,000
(ii) Engineer-in-Chief holding charge of a line under construction or survey ... ..	5,000
(iii) Agent of an open line ... ..	10,000
(iv) Railway Board ... ..	Full powers.

**NOTE.**—Agents of open lines may delegate to their Engineers-in-Chief, Executive Engineers, or Assistant Engineers holding charge of a division, such power of purchase as they deem fit up to the limits specified for lines under construction, and to their Chief Storekeepers up to the limits specified for Executive Engineers.



(d) *Army Department.*

(i) Director-General of Military Works	...	Full powers.
		Rs.
(ii) Divisional Commander	...	10,000
(iii) Officer Commanding an independent brigade; Director-General of Ordnance*; Director, Royal Indian Marine; Director-General, Indian Medical Service (for medical store depots); Director, Army Clothing; Director-General, Army Remount Department; and Controller of Contracts attached to the Quartermaster General, Army Headquarters	...	5,000
(iv) Officer Commanding a brigade, other than those included in (iii); Director of Ordnance Factories; Director of Ordnance Inspection and Director of Ordnance Stores	... ..	2,000
(v) Superintendent, Army Clothing Factory; Supply and Transport Officer on special duty in Kashmir; and Deputy Director, Royal Indian Marine	... ..	1,000
(vi) Chief of the General Staff; General Officers Commanding, Northern and Southern Armies; Adjutant General in India; Quartermaster General in India; Director, Medical Services, Army Headquarters, India; Military Secretary to His Excellency the Commander-in-Chief; Military Accountant General; Controllers of Military Accounts and Controller of Military Supply Accounts	... ..	500
(vii) Officer Commanding a station; Superintendent, Army Remount Department; Superintendent, Ordnance Factory; Government Inspector of Army Boots Factory, Cawnpore; Assistant Directors of Ordnance Stores; Inspectors (Ordnance Department); the Assistant Inspector in charge of General Stores and the Proof and Experimental Officer, Balasore; Medical Storekeeper; Commandant, Indian Staff College; Assistant Director of Supplies; Assistant Director of Transport; and Assistant Director of Grass Farms	...	400
(viii) Officer Commanding a unit (including a hospital); Senior Medical Officer, Indian Medical Service, of a station; Recruiting Officer for Gurkhas at Gorakhpur; Officers (Ordnance or Departmental) in charge of depots; Assistant Inspectors (Ordnance Department) with the exception of the Assistant Inspector in charge of General Stores; Officer in charge of Supply Reserve Depots; Commissioned Officers Commanding Depot Transport Lines; Officer in charge of Supplies and Chief Chemical Examiner	... ..	40

\* The Director-General of Ordnance has full powers of local purchase under Rule 5 in cases where the purchases are required to meet urgent field service requirements or to replace issue from mobilization reserves for the equipment of troops suddenly ordered on field service.

*(e) Stores Department, India.*

(i) Controller General of Stores	...	...	Full powers.
			Rs.
(ii) Metallurgical Inspector, Jamshedpur	...	...	500

NOTE 1.—The financial limits imposed under this rule in respect of purchases made under rule 3 (a) and 5 do not apply to the purchase of articles required on mobilisation or during the continuance of military operations.

NOTE 2.—These powers are subject to the rules of the budget system. No sanction may be given which will involve expenditure from the budget grant of any future year. The powers extending to each sanction, whether against Army, Military Works or Marine funds. In the case of the Ordnance, Medical Store, and Remount Departments, the Divisional Brigade and Station Commanders are not competent financial authorities.

Rule 12.—*Power to sanction departures from the rules.*

The Government of India have power to sanction departures from the rules in cases in which such departure is absolutely unavoidable (subject to a report to the Secretary of State if the expenditure exceeds Rs. 50,000).

## APPENDICES.

(Not reprinted.)

## SECTION V.

## PROCEDURE IN REGARD TO HOME INDENTS.

17. We have indicated our disagreement with the attitude of the Committee on the general question of the method of purchasing such non-indigenous stores as will still have to be purchased for the public service. In conformity with their views on this subject our colleagues suggest the introduction of a system of indenting for requirements which will enable the head of the Stores Department in India to exercise the wide discretion in regard to such purchases which they desire he should have. In our opinion the procedure indicated is unnecessary and will be found cumbrous and dilatory in practice.

18. It is therefore necessary to define the procedure which in our opinion should be observed (a) by indenting officers and departments, and (b) by the central agency, to enable the necessary scrutiny of indents to be carried out efficiently with the minimum amount of inconvenience and delay. The view we have expressed, and which appears to be in accordance with that of the Industrial Commission and of the Government of India, is that the Stores Rules in regard to the purchase of imported stores are based on sound principles and only require to be altered in certain minor respects so as to adapt them to present conditions and recent developments, particularly the proposed establishment of an Indian Stores Department. If this view is accepted the procedure of scrutinising the Home indents need not, we think, be complicated by any general endeavour to ascertain whether articles which must in any case be imported can be obtained of suitable quality and at a satisfactory price from *merchants* in India. Such action would tend greatly to delay a decision on the question whether the articles should be included or excluded from the Home indent, and would in our opinion have no good result. The reasons on which we base this opinion have already been explained in some detail.

19. As regards purchase of plant and machinery through Indian branches of British manufacturing firms, we have suggested in the amended Stores Rules the conditions which should govern such transactions. These conditions are generally in accordance with the recommendations of the Government of India contained in the despatch quoted above and due regard has been paid to the observations of the Secretary of State in his Despatch No. 5-Stores, dated 20th September 1918. We consider that, subject to those conditions, the Controller General of Stores, and other qualified officers as therein provided, should be free so to purchase plant and machinery when they regard it as advantageous to do so; but in as much as one of the main reasons urged by the Government of India for permitting this method of purchase is that the branch employed will be able to afford technical advice and assistance to the indenting officer and will also be able to erect the plant and correct any defects that may develop later, it seems to us to be almost certain that when the indenting officer requires such assistance, etc., he will either purchase the plant himself, or will ask the Controller General of Stores to do so, should such purchase not be within the powers assigned to him. We therefore assume that purchases of this nature, when contemplated, will not come within the scope of the Home indents and will therefore not affect the prompt transmission of indents to the Home agency for compliance.

20. The organisation which is being recommended for the Stores Department in India, and its intimate association with the Directors of Industries in the various provinces, should ensure that full information will be available in the headquarters of the Department and at its provincial agencies as to the capacities and developments of local industries. The Department should, therefore, by the aid of the information which we propose that it shall constantly receive from the Home agency as to Home prices, be able to decide in most cases without difficulty whether or not demands for imported stores can be satisfactorily met by articles of local manufacture. In special cases the Controller General of Stores, India, before coming to a decision whether or not it will be economical to purchase stores of Indian manufacture may find it necessary to consult the Director General of Stores, London, by telegraphic reference as to Home prices. To facilitate such references it might be advisable to consider whether the existing Stores Code, which was drawn up some years ago, but has been little used, could be adapted for the purpose. In the case of important contracts, such as for example a large hydro-electric scheme (and possibly for ship-building) when considerable delay must in any event probably occur between the submission of tenders and their acceptance, it may sometimes be feasible to call for simultaneous tenders in England and India to an identical specification, but for ordinary supplies we are advised that the invitation of simultaneous tenders presents many practical difficulties, not the least of which is that of coming to a prompt decision on tenders received from countries many thousand miles apart, especially when as often happens technical or other

questions are raised by tenderers and must be settled before the order can be placed. It may be well to quote here from the evidence of Mr. F. Palmer, C.I.E., a partner in the firm which acts as Consulting Engineers to the India Office. He said :—

“The main difficulty in the way of simultaneous tendering by firms in India and Great Britain was the very frequent practice which firms had of slipping qualifying clauses into their tenders. The tender which appeared to be the lowest might not necessarily be so. All tenders had to be subjected to most rigorous examination and comparison and this ruled out the use of cables. The one that appeared to be a very favourable tender in response to say a call for a girder in which the steel was required to pass up to 30 tons might be found to contain an inconspicuous clause that the steel in the girder offered could only be guaranteed up to 25 tons. Provided the tenders were ‘clean,’ that is, free from all qualifications, he would accept the lowest whether from India or from Great Britain. Even in normal times he had found the prices to vary considerably in very short periods.”

We therefore do not recommend the general practice of calling for simultaneous tenders. Even in the case of important works or installations, we consider that simultaneous tenders should only be invited under the advice of the Consulting Engineers or other officers responsible for the design and efficiency of the plant specified.

21. It will be for the Controller General of Stores in India to decide whether or not demands for imported stores can be satisfactorily met by the supply of articles of Indian origin. If they cannot be so met we consider that the demands should be passed to the Home agency for compliance and that the responsibility of the Stores Department in India regarding them should thereupon cease. We consider also that when simultaneous tenders have been invited and the Home tender is found to be the more favourable, the order should be placed by the Home agency and action on the demand on which it arises should be entrusted entirely to that agency.

22. In these circumstances the procedure for scrutiny which we propose is as follows: Indenting officers, and departments, and among these we would include local Governments and Administrations and the state and company-worked railways, should prepare, as they do now, separate indents for stores which in their opinion cannot be obtained advantageously of local manufacture and must therefore be imported. In preparing these indents, they will be guided by information which will be furnished to them from time to time by the central agency as to the development of local industries. We consider that theoretically it would be best for the Home indents thus prepared to be forwarded to the central agency for scrutiny before they are sent Home. In that case, they would after scrutiny be

countersigned by the Controller General of Stores and forwarded by him direct to the Director General of Stores, London, or other Home agency, for compliance. Should the Controller General of Stores on scrutiny of an indent consider any article or articles comprised therein to be such as could advantageously be obtained of Indian manufacture, he would either strike the item or items in question out of the indent, or suspend their supply pending further enquiries, informing the indenting officer of the action taken, but would not delay the whole indent pending such enquiry. In cases of small importance, it would probably be sufficient for him to warn the indenting officer that in future such articles should be obtained of local manufacture mentioning the probable source or sources of supply. The matter could then be investigated before the next indent was prepared. But, though theoretically the above procedure would afford the greatest security against articles being imported which might with equal advantage be obtained of Indian manufacture, we think that in practice it would suffice and would avoid the delay due to the scrutiny if, at the time the indent was sent Home, a copy of it was sent to the Controller General of Stores for scrutiny. If on making such scrutiny that officer wished to strike any item or items out of the indent, with a view to the substitution of articles of Indian manufacture, or to suspend the supply of such articles pending further inquiry, it would be easy for him, unless scrutiny were unduly delayed, to request the Home agency by telegraph to cancel or suspend the item or items in question and in time to prevent any action being taken towards their purchase in England. The telegram should be confirmed by letter and the indenting officer should be informed. The indents should bear a certificate that a copy has been sent to the Controller General of Stores for scrutiny.

23. Whichever procedure for scrutiny is adopted we consider that when once an indent has been passed to the Home agency, whether the Director General of Stores, London, or the Board of Directors of the railway company concerned, or their Consulting Engineers, all responsibility for compliance with the indent should rest with the Home agency and not with the Controller General of Stores in India, and that all correspondence regarding the indent or the stores demanded should be carried on as at present between the Home agency and the indenting officer direct.

## SECTION VI.

### ORGANIZATION.

24. Differing as we do from the majority of the Committee in our views as to the work to be undertaken by the new Department, *i.e.*, in respect of imported stores,—which they evidently expect to be bought freely in India whereas we consider that these should still be bought as a rule through the Director General of Stores, London,—it may naturally appear that we should logically hold that the staff which they recommend should be reduced. This would be so if the numbers and cost of the proposed staff could be directly correlated with the volume of work to be done; but for several

reasons this is not the case. The Committee obviously can make no reliable estimate of the extent to which local Governments, Native States, railway companies, municipalities and other *quasi*-public bodies will utilise the new agency; and even if the actual clients were known still only an approximate idea could be formed of the total volume of work to be done. Moreover the staff that would be necessary to transact any definite volume of business in the unusual conditions in which the new Stores Department will work must be largely a matter of speculation at the outset. And finally the Committee have held, for reasons which we consider good, that technical specialists must be employed in the several distinct purchasing and inspection branches; and within limits the precise amount of work that may fall to the lot of any such branch would not affect the necessity for retaining the services of these officers.

25. We are in agreement with our colleagues that, at the outset at least, the superior staff indicated by them as necessary for the work of the various branches appears to represent an irreducible minimum, and that even if the Department handles in practice a much smaller quantity of imported stores than the Committee anticipates, a corresponding reduction of the superior staff will not be found practicable. As regards subordinate establishments the numbers and therefore the cost may more reasonably be expected to depend on the volume of stores handled and we therefore incline to the opinion that, if the policy and procedure which we recommend is adopted, the Committee's estimate of cost under this head may in practice prove to be susceptible of reduction.

## SECTION VII.

### RELATIONS OF THE INDIAN WITH THE HOME STORES AGENCY.

26. We agree with the Committee that the Store Department of the India Office should be placed under a High Commissioner for India; but we disagree with their view that this should only be done as a temporary expedient and that after the Indian Stores Department has been formed the Home agency should be made a branch of the Stores Department in India, though still under the control of the High Commissioner in regard to matters of establishment, discipline and law.

27. Even supposing that the High Commissioner would be willing, which we think extremely improbable, to accept the charge of the Department under such conditions, it seems to us that it would be quite impracticable for the Department itself to serve two masters. Either it must be wholly under the control of the High Commissioner or wholly under that of the Stores Department in India, and of these alternatives we have no doubt whatever that the former is preferable. We assume that the High Commissioner will exercise in respect of the Director General of Stores, London, those general functions of control and assistance which are now exercised by the Secretary of State for India and by the Stores Committee of the Council of India with his authority as explained in Appendix E to the Committee's report. We consider that such control and

assistance is very necessary and could only be efficiently exercised by an authority in immediate touch with the Director General in London. We cannot see that any useful purpose would be served by making the Department in England subordinate to the Department in India. On the contrary, we think that the Controller General of Stores in India will have enough to do in organising and running the Department in India without being saddled with any responsibility for the working of another Department 6,000 miles away. It appears to us that these two agencies should be quite distinct though working in co-operation and corresponding freely with one another.

28. If the central agency in India is established on the lines proposed it will itself scrutinise all indents in order to eliminate all items which should be purchased in India under rules to be laid down. Having done this it will pass the indents to the Stores Department in England for compliance. The agency in India and the agency in England will both be under the Government of India as will the High Commissioner himself if appointed. The functions of the two agencies will be parallel, one being charged with the duty of buying stores in India, the other with that of buying at Home. We can no more conceive that it would be practicable for the agency in India to control the agency in London than we can conceive the reverse. In fact, we are convinced that it would be impossible to carry on the London agency satisfactorily unless it is allowed a perfectly free hand to do its best, with all the local knowledge and experience which it possesses, to supply stores of satisfactory quality, and of the description required by the indenting departments, at the best price obtainable.

29. Both agencies must be considered to be the servants of the departments to which they make supplies, and must be responsible to them for the quality and price of the stores supplied. When questions arise in regard to quality, price or urgency it is essential that each supplying agency should be in direct touch with the departments served. Where questions of policy arise the matter must be decided by the Government of India after consulting either or both agencies and hearing their views. As regards the English agency, the views would probably be ascertained through the High Commissioner. In our opinion, the views of the Home agency are just as much entitled to consideration as those of the Indian agency, and there is no doubt that a Department which has built up its experience for over 50 years should be in a position to deal with problems arising in England better than a new Department which for several years to come can have but small experience and that almost entirely Indian.

30. There seems to us to be no reason why a separate agency in London should not be able to afford just as much assistance to the agency in India in the capacity of a distinct and separate Department as if it were treated as a branch of the latter. It is found practicable in India to have many agencies, *e.g.*, railways, having very similar duties, but independent of one

another, though working in co-ordination for the benefit of the country. So far as we can judge the system works well. A general control of the railways is maintained by the Railway Board, and in the case of the Stores Agencies control would be maintained by one of the departments of the Government of India presumably the Industries Department.

(Signed) G. H. COLLIER,

„ T. RYAN.





## APPENDIX A.

## LIST OF WITNESSES.

**I.—Witnesses examined before the Committee.**

*Calcutta, 17th December 1919 to 12th January 1920.*

- (1) W. E. Marchinton, Esq., Deputy Controller of Munitions, Bengal.
- (2) J. F. Lewis, Esq., Manager, Carriage and Wagon Department, Messrs. Burn and Co., Ltd., Howrah.
- (3) J. G. Fulton, Esq., Bridge and Structural Department, Messrs. Burn and Co., Ltd., Howrah.
- (4) H. Burkinshaw, Esq., Consulting Engineer with Messrs. Bird and Co., Calcutta.
- (5) The Hon'ble Major-General W. H. B. Robinson, C.B., K.H.S., I.M.S., Surgeon General with the Government of Bengal.
- (6) J. J. Meikle, Esq., O.B.E., V.D., Superintendent, Government Printing, India.
- (7) Rai Abinash Chander Banerjee Bahadur, nominated by the Bengal National Chamber of Commerce.
- (8) J. M. Bates, Esq., Manager, Shipbuilding Department, Messrs. Burn and Co., Ltd., Howrah.
- (9) Lieutenant-Colonel C. E. G. Schrottky, R.A., Inspector of Gun Carriages and Vehicles, Jubbulpore.
- (10) Jotindra Nath Ghosh, Esq., nominated by the Bengal National Chamber of Commerce.
- (11) G. Wells, Esq., Controller of Stores, East Indian Railway.
- (12) H. F. Davy, Esq., Officiating Superintendent of Local Manufactures and Government Test House, Alipore.
- (13) M. N. Crawford, Esq., Assistant to the Chief Engineer, Telegraphs.
- (14) M. L. Pasricha, Esq., Superintendent of Telegraph Stores.
- (15) E. Daltry, Esq., Officiating Controller of Printing, Stationery and Stamps.
- (16) F. W. Wadley, Esq., Controller of Stores, Eastern Bengal Railway.
- (17) The Hon'ble Dr. Sir Nilratan Sirkar, Kt., M.D., Vice-Chancellor, Calcutta University.
- (18) T. N. Banerjee, Esq., Superintendent of Stores, Corporation of Calcutta.
- (19) Brigadier-General H. A. Young, C.I.E., C.B.E., R.A., Director of Ordnance Factories.
- (20) C. P. Walsh, Esq., Secretary, Public Works Department, Bengal, (Roads, Buildings and Railways).
- (21) T. A. Ferrier, Esq., C.B.E., Officer-in-charge, Mathematical Instrument Office.
- (22) J. A. Simpson, Esq., Controller of Stores, Bengal-Nagpur Railway.
- (23) Miller M. King, Esq., nominated by the Indian Engineering Association, Calcutta.
- (24) Lieutenant-Colonel B. J. Singh, C.I.E., I.M.S., Inspector General of Prisons, Bihar and Orissa.

- (25) R. C. Arbery, Esq., Officiating Metallurgical Inspector, Jamshedpur.
- (26) H. E. Skinner, Esq., nominated by the Indian Engineering Association, Calcutta.
- (27) A. James, Esq., Superintendent of Stores, Assam-Bengal Railway.

*Rangoon, 16th to 20th January 1920.*

- (28) A. Rodger, Esq., O.B.E., Forest Research Officer, Burma.
- (29) H. Walton, Esq., M.B.E., M.Sc., Executive Engineer, Ye-U Canal Division.
- (30) J. C. Paulson, Esq., Superintendent of Stores, Burma Railways.
- (31) J. W. Richardson, Esq., nominated by the Burma Chamber of Commerce.
- (32) T. Fforde, Esq., Superintendent of Police Supplies, Burma.
- (33) M. Oppenheimer, Esq., nominated by the Rangoon Trades Association.
- (34) R. A. Horne, Esq., Dockyard Superintendent, Irrawaddy Flotilla Co., Ltd.
- (35) T. E. Gibson, Esq., nominated by the Burma Chamber of Commerce.
- (36) Major A. Whitmore, M.D., I.M.S., Civil Surgeon, Rangoon.

*Madras, 27th January to 2nd February 1920.*

- (37) S. J. Green, Esq., nominated by the Madras Trades Association.
- (38) H. P. DeCouroy, Esq., A.M.I.C.E., Superintendent, Public Works Stores, Madras.
- (39) W. Sargeant, Esq., Locomotive and Carriage Superintendent, Madras and Southern Mahratta Railway.
- (40) P. C. Woodd, Esq., Superintendent of Stores, Madras and Southern Mahratta Railway.
- (41) A. R. L. Tottenham, Esq., I.C.S., Superintendent of Stationery, Madras.
- (42) Lieutenant-Colonel F. E. Swinton, C.I.E., I.M.S., Medical Storekeeper to Government, Madras.
- (43) J. W. Madeley, Esq., M.A., M.I.C.E., C.E., etc., Special Engineer, Corporation of Madras.
- (44) The Hon'ble Mr. S. Cox, Chief Conservator of Forests, Madras.
- (45) L. B. Green, Esq., M.B.E., Assistant Director of Industries, Madras.
- (46) C. Crighton, Esq., V.D., Locomotive and Carriage Superintendent, South Indian Railway.
- (47) A. H. Christie, Esq., Superintendent of Stores, South Indian Railway.
- (48) A. P. Symonds, Esq., nominated by the Madras Chamber of Commerce.
- (49) The Hon'ble Mr. H. H. G. Mitchell, Chief Engineer Madras Port Trust.

*Bombay, 5th to 16th February 1920.*

- (50) Engineer Lieutenant Commander R. H. Ansell, R.I.M., Marine Store Officer, Bombay.

- (51) Engineer Captain C. F. Laslett, M.B.E., R.I.M., Inspector of Machinery, R.T.M., Dockyard, Bombay.
- (52) Lieutenant-Colonel P. Johnson, C.B.E., D.S.O., of Messrs. John Fowler and Company, Bombay.
- (53) G. R. Webb, Esq., M.I.E.E., M.B.E., V.D., Chief Stores Superintendent, Great Indian Peninsula Railway.
- (54) C. B. Pooley, Esq., Executive Engineer, Lake Whiting District, Bhatghar.
- (55) Captain N. F. J. Wilson, C.M.G., C.B.E., A.D.C., R.I.M., Director, Royal Indian Marine, Bombay.
- (56) H. L. Richards, Esq., nominated by the Bombay Chamber of Commerce.
- (57) G. H. Thiselton-Dyer, Esq., Deputy Director of Industries, Bombay.
- (58) Major G. H. Willis, C.I.E., M.V.O., R.E., M.I.M.E., Mint Master, Bombay, nominated also by the Institution of Engineers, India.
- (59) P. J. Gahan, Esq., M.B.E., Controller (Sales), Indian Munitions Board, Bombay.
- (60) J. C. K. Peterson, Esq., of Messrs. Tata Sons, Limited, Bombay.
- (61) W. J. McCaulis, Esq., Chief Storekeeper, Bombay, Baroda and Central India Railway.
- (62) Jehangir Bomanji Petit, Esq., nominated by the Indian Merchants Chamber and Bureau, Bombay.
- (63) N. M. Muzumdar, Esq., nominated by the Indian Merchants' Chamber and Bureau, Bombay.
- (64) H. Lees, Esq., Chief Storekeeper, Bombay Port Trust.
- (65) Major C. F. Marr, M.B., I.M.S., Medical Storekeeper to Government, Bombay.
- (66) N. B. Saklatvala, Esq., nominated by the Bombay Millowners' Association.
- (67) K. S. Framji, Esq., B.A., L.C.E., Superintending Engineer, Central Division, Poona.
- (68) F. Palmer, Esq., C.I.E., of Messrs. Rendel, Palmer and Tritton, Consulting Engineers to the India Office.

*Nagpur, 18th and 19th February 1920.*

- (69) P. Davies, Esq., A.M.I.C.E., Under Secretary, Public Works Department, Buildings and Roads Branch, Central Provinces.
- (70) H. Frederickson, Esq., Manager, Bengal Nagpur Cotton Mill.
- (71) F. J. Plymen, Esq., A.C.G.I., Deputy Director of Agriculture, Western Circle, Central Provinces.

*Calcutta, 23rd February to 1st March 1920.*

- (72) Rai Bahadur A. P. Mullick, M. A., Officiating Superintending Engineer, Assam Circle.
- (73) Motilal Fumra, Esq., nominated by the Marwari Chamber of Commerce, Calcutta.
- (74) Sagarmalji Harilalka, Esq., nominated by the Marwari Chamber of Commerce, Calcutta.
- (75) The Hon'ble Mr. C. D. M. Hindley, V.D., Agent, East Indian Railway.
- (76) C. Warren Boulton, Esq., of Messrs. Alfred Herbert (India), Limited, Calcutta.

- (77) Dr. W. A. K. Christie, B. Sc., Ph. D., Chemist, Geological Survey of India, Officiating Deputy Assay Master, Calcutta.
- (78) M. J. Cogswell, Esq., C.I.E., Contoller of Printing, Stationery and Stamps, Calcutta.
- (79) B. Heaton, Esq., Principal, Civil Engineering College, Sibpur.
- (80) J. L. Reid, Esq., nominated by the Indian Engineering Association, Calcutta.
- (81) A. C. Wright, Esq., of the Shalimar Paint Colour and Varnish Company, Limited, Calcutta.
- (82) W. Hodgkinson, Esq., nominated by the Institute of Engineers (India).

*Cawnpore, 4th to 6th March 1920.*

- (83) C. R. O'Malley, Esq., Offg. Director of Industries, United Provinces, Cawnpore.
- (84) F. H. Vick, Esq., M.I.M.E., F.R.S.A., Agricultural Engineer to Government, United Provinces, Cawnpore.
- (85) Lieutenant-Colonel W. B. Spalding, O.B.E., R.A., Chief Inspector of General Stores, Harness Factory, Cawnpore.
- (86) E. R. Stevens, Esq., I.F.S., Conservator of Forests, Utilization Circle, United Provinces.
- (87) The Hon'ble Mr. C. Y. Chintamani, Editor, "The Leader," Allahabad.
- (88) J. G. Ryan, Esq., nominated by the Upper India Chamber of Commerce, Cawnpore.
- (89) Rai Sahib Dr. Murari Lal, M. B., nominated by the United Provinces Chamber of Commerce, Cawnpore.

*Lucknow, 8th and 9th March 1920.*

- (90) F. C. Freeman, Esq., Controller of Stores, Oudh and Rohilkhand Railway, Lucknow.
- (91) F. J. Harvey, Esq., Agent, Oudh and Rohilkhand Railway, Lucknow.
- (92) Colonel C. Ainslie, R.E., Commanding Royal Engineer, 8th (Lucknow) Division, Lucknow.

*Lahore, 12th to 19th March 1920.*

- (93) E. A. Scott, Esq., C.B.E., Assistant Director of Industries, Punjab.
- (94) Rai Bahadur Ganga Ram, C.I.E., M.V.O., Executive Engineer, Public Works Department (Retired).
- (95) Colonel H. A. D. Fraser, R.E., Commanding Royal Engineer, 1st (Peshawar) Division.
- (96) Hem Raj, Esq., of Messrs. Dina Nath Hem Raj and Co., General Merchants and Government Contractors, Lahore.
- (97) C. F. Langer, Esq., O.B.E., Controller of Stores, North Western Railway.
- (98) Major G. E. Nottidge, O.B.E., R.E., Officer-in-charge, Central Mechanical Transport Stores Depot, Rawalpindi.
- (99) The Hon'ble Mr. F. W. Woods, C.I.E., Secretary to the Government of the Punjab, Public Works Department, Irrigation Branch.
- (100) W. R. Macpherson, Esq., of Messrs. Spedding and Co., Lahore.
- (101) A. S. Montgomery, Esq., Secretary to the Government of the Punjab, Public Works Department, Buildings and Roads Branch, Lahore.

- (102) Lieutenant-Colonel B. C. Battye, R.E., D.S.O., Executive Engineer, Sutlej River Hydro-Electric Project Division, Rupar.
- (103) F. A. Hadow, Esq., Agent, North Western Railway.
- (104) Lieutenant-Colonel C. W. Wilkinson, C.M.G., D.S.O., R.E., Chief Engineer, North Western Railway.

*Delhi, 22nd March 1920.*

- (105) C. G. Barnett, Esq., Superintending Engineer, Public Works Department, 1st Circle, Delhi.
- (106) Banwari Lal, Esq., of Messrs. Bhana Mal Gulzari Mal, Delhi.
- (107) R. Grant Govan, Esq., of Messrs. Govan Bros., Kashmere Gate, Delhi.

*- Simla, 22nd April to 21st May 1920.*

- (108) J. MacKenna, Esq., M.A., C.I.E., I.C.S., Agricultural Adviser to the Government of India and Director of the Agricultural Research Institute, Pusa
- (109) Major-General Sir H. W. Perry, K.C.M.G., C. B., C.S.I., R.A.O.C., Director of Equipment and Ordnance Stores, Army Headquarters.
- (110) Brigadier-General R. E. Vaughan, C.B., Director of Supplies and Transport, Army Headquarters.
- (111) A. J. Gibson, Esq., F.C.H., F.L.S., I.F.S., Forest Economist, Forest Research Institute, Dehra Dun.
- (112) Major-General J. C. Rimington, C.B., C.S.I., Director General of Military Works, Army Headquarters.
- (113) The Hon'ble Colonel (Temporary Major-General) Sir S. D'A. Crookshank, K.C.M.G., C.B., C.I.E., D.S.O., M.V.O., Secretary to the Government of India, Public Works Department.
- (114) Brigadier-General L.R. Kenyon, C.B., R.A., Director General of Ordnance, Army Headquarters.
- (115) Colonel G. S. Ogg, C.I.E., Director of Ordnance Inspection, Army Headquarters.
- (116) Sir G. S. Hart, K.B.E., C.I.E., Inspector General of Forests.
- (117) Lieutenant-Colonel H. M. Alexander, D.S.O., O.B.E., I.A., Controller (Textiles) and Military Assistant (Clothing), Indian Munitions Board.
- (118) D. L. McPherson, Esq., Controller (Munitions Manufacture), Indian Munitions Board.
- (119) R. W. Clutch, Esq., B. Sc., Mining Engineer, and Metallurgist, Railway Department.
- (120) The Hon'ble Major-General W. R. Edwards, C.B., C.M.G., M.D., F.R.C.S.E., K.H.P., I.M.S., Director General, Indian Medical Service.
- (121) Lieutenant-Colonel H. Ross, O.B.E., M.B., F.R.C.S.I., I.M.S., Deputy Director General, Indian Medical Service.
- (122) Major-General Sir G. F. MacMunn, K.C.B., K.C.S.I., D.S.O., Quartermaster-General in India, Army Headquarters, Simla.
- (123) The Hon'ble Mr. G. R. Clarke, O.B.E., I.C.S., Director General of Posts and Telegraphs.
- (124) W. Sutherland, Esq., V.D., M.I.E.E., Officiating Chief Engineer, Telegraphs.
- (125) The Hon'ble Major-General Sir A. H. Bingley, K.C.I.E., C.B., Secretary to the Government of India, Army Department.

- (126) Air Commodore T. I. Webb-Bowen, C.B., D.S.O., Royal Air Force, Simla.
- (127) Colonel W. D. Waghorn, C.B., C.M.G., R.E., President, Railway Board.
- (128) E. A. S. Bell, Esq., C.I.E., F.C.H., Member, Railway Board.
- (129) Lieutenant-Colonel W. M. Coldstream, R.E., Officiating Surveyor General of India.
- (130) K. C. Roy, Esq., Representative of the Associated Press of India, Simla.
- (131) The Hon'ble Rao Bahadur B. N. Sarma, Elected Member of the Imperial Legislative Council.

**II.—Witnesses not examined orally by the Committee.**

*Bengal.*

- (132) A. C. Coubrough Esq., of Messrs. Mather and Platt, Calcutta.
- (133) The Hon'ble Mr. F. A. A. Cowley, C.I.E., Secretary to the Government of Bengal, Irrigation Department.
- (134) Sir H. A. Farrington, Bart., Conservator of Forests, Bengal.
- (135) Lieutenant-Colonel F. S. C. Thompson, O.B.E., M.B., I.M.S., Inspector General of Prisons, Bengal.
- (136) J. H. Wiggett, Esq., M.B.E., nominated by the Calcutta Trades Association.

*Assam.*

- (137) The Hon'ble Rai Nagendra Nath Chowdhury Bahadur, Chairman, North Sylhet Local Board, Assam.
- (138) The Hon'ble Mr. O. H. Desenne, Secretary and Chief Engineer, Public Works Department, Assam.
- (139) H. W. Fox, Esq., nominated by the Chittagong Chamber of Commerce.
- (140) Rai Sabib Mono Mohan Lahiri, B.L., Pleader, District Court, and Chairman, Tezpur Municipality.
- (141) N. O. Peters, Esq., I.S.O., Manager, Jorhat Railway.

*Burma.*

- (142) The Hon'ble Mr. F. A. Leete, F.C.H., Chief Conservator of Forests, Burma.

*Madras.*

- (143) A. A. Biggs, Esq., Chief Engineer, Madras and Southern Mahratta Railway.
- (144) Major J. P. Cameron, I.M.S., Inspector General of Prisons, Madras.
- (145) E. D. Puzey, Esq., V.D., Superintendent of Stores, His Exalted Highness the Nizam's Guaranteed State Railway.

*Bombay.*

- (146) Captain F. N. Booth, I.A.R.O., Purchasing Officer, Mechanical Transport Stores, Bombay.
- (147) Dr. E. J. Butler, M.B., F.L.S., Imperial Mycologist and Joint Director, Agricultural Research Institute, Pusa.

- (148) Major D. S. Johnston, R.E., Executive Engineer, Presidency District, Bombay.
- (149) Ambalal Sarabhai, Esq., nominated by the Ahmedabad Mill-owners' Association.
- (150) R. H. Young, Esq., nominated by the Karachi Chamber of Commerce.

*Central Provinces.*

- (151) D. Clouston, Esq., M.A., B.Sc., C.I.E., Director of Agriculture, Central Provinces
- (152) H. D. Coggan, Esq., of the Central India Mining Company, Rampetee.

*United Provinces.*

- (153) J. C. Ferguson, Esq., I.C.S., Officiating Commissioner, Northern India Salt Revenue, Agra.
- (154) J. A. Kellie, Esq., Agent and Chief Engineer, Rohilkund and Kumaon Railway.
- (155) Colonel E. C. Ogilvie, C.M.G., C.B.E., Commanding Royal Engineer, Meerut Division.
- (156) W. F. Perree, Esq., President, Forest Research Institute and College, Dehra Dun.

*Punjab.*

- (157) J. W. A. Grieve, Esq., I.F.S., Conservator of Forests, Eastern Circle, Punjab, Lahore.
- (158) Rai Sahib Lala Panna Lal, nominated by the Punjab Chamber of Commerce.
- (159) H. R. Phelps, Esq., nominated by the Punjab Trades Association.
- (160) K. Preston, Esq., Electrical Engineer, North-Western Railway.
- (161) Flight Lieutenant J. Robertson, R.A.F., Superintendent, Aircraft Factory, Lahore.

*Delhi.*

- (162) J. S. Pitkeathly, Esq., C.V.O., C.B.E., D.S.O., Electrical Engineer, Delhi.

*Simla.*

- (163) G. H. W. Davies, Esq., I.C.S., Controller (Industrial Intelligence, Home Indents, etc.), Indian Munitions Board, Simla.
- (164) N. V. Holberton, Esq., Controller, (Timber Supplies), Indian Munitions Board, Simla.
- (165) A. J. R. Hope, Esq., Superintending Engineer, Simla Imperial Circle.
- (166) A. H. Silver, Esq., C. I. E., of Messrs. Mitchell and Company, Delhi.
- (167) C. A. Williams, Esq., Deputy Controller (Munitions Manufacture), Indian Munitions Board, Simla.



**III.—Directors of Industries and others**

- (168) D. B. Meek, Esq., Controller of Munitions, Bengal Circle.
- (169) J. P. Hardiman, Esq., B. A., I. C. S., Commissioner, Meiktila Division, Burma, (formerly Controller of Munitions, Burma).
- (170) The Hon'ble Mr. A. Y. G. Campbell. C.I.E., I.C.S., Director of Industries, Madras.
- (171) R. D. Bell, Esq., C.I.E., M.A., B.Sc., I.C.S., Director of Industries, Bombay Circle, Bombay.
- (172) A. L. Hoyle, Esq., I.C.S., Director of Industries, Central Provinces.
- (173) Rai Kanak Lal Barua Bahadur, B. C., Director of Industries, Assam.
- (174) The Hon'ble Mr. E. A. H. Blunt, O.B.E., I.C.S., Officiating Financial Secretary to the Government of the United Provinces (formerly Director of Industries, United Provinces.)
- (175) The Hon'ble Mr. C. A. H. Townsend, I. C. S., Director of Industries, Punjab.

## APPENDIX B.

## HISTORY OF THE RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE IN INDIA. 1862-1918.

In Secretary of State's Financial Despatch No. 218 of 27th December 1862, it was laid down that all articles manufactured in England should be procured only through the Stores Department of the India Office. It will be convenient to trace the evolution of the stores rules from the year 1870 in which the Government of India under Financial Resolution No. 3381, dated the 9th September 1870, directed that the control over indents, estimates and accounts of stores procured from Europe should be exercised in the Finance Department.

Rules  
1862.

2. After preliminary correspondence with the departments concerned, the Government of India issued a Resolution (No. 1267, Finance Department, dated the 21st July 1871) detailing the procedure to be adopted in the submission of indents and the preparation of estimates and accounts for civil and military stores (the annual expenditure in England on stores then averaged £1,352,000, of which £810,000 was for military stores). There is no trace in this resolution of any policy of encouragement of local industries, nor was the question of local purchase referred to.

Rules  
proc.  
1871.

3. A revised set of rules was issued by the Government of India in Finance Department Resolution No. 3991, of 14th October 1875, laying down that articles required for the public service from Europe or America must be obtained by indent on the Secretary of State and were not to be bought in India, except:—

Rules

- (a) with previous sanction of the Government of India, or local government, when inconvenience to the public service would arise owing to delay in supply of stores indented from England;
- (b) with sanction of head of department when small supplies are urgently necessary;
- (c) when articles are of a perishable nature;
- (d) articles of occasional consumption to keep which in stock would be obviously less economical than occasional purchase in India.

These rules were communicated to the Secretary of State under Government of India No. 374 of 14th October 1875.

4. Lord Salisbury was of the opinion that a change in procedure might be adopted with advantage. In his Despatch No. 4771 (Financial) of 7th December 1876 he reviewed the whole question and referred to the Secretary of State's Financial Despatch No. 218 of 27th December 1862. It was pointed out that since that date payments for stores had greatly increased; and that the arrangements under which specified sums were allotted to provincial governments to defray expenditure gave those governments a direct interest in purchasing stores on the most reasonable terms.

Propo  
1876  
purch  
India

For these and other reasons he had recently appointed a committee to enquire into the functions and administration of the India Office, Store Department, and he forwarded extracts of the committee's report dated 31st October 1876.

The Secretary of State went on to say—

“The Committee, having regard to the importance of reducing as far as possible payments in England as well as of expediting the supply of stores for India, recommended that, in substitution of the present rule requiring orders for all stores to be given through the India Office, it should be left to the Government of India and local governments to decide as to the mode in which, and persons by whom, supplies of any kind might be obtained, subject to the condition that nothing, except articles of Indian origin, should be purchased or ordered in India unless it could be paid for on delivery there after approval, and that no advances should be made to any agent or firm in respect of such service.”

It was stated further that the committee pointed out that there were certain classes of stores which obviously could not advantageously be procured in India (i.e., special machinery,

railway, engineering and (telegraph plant) and which must necessarily continue to be obtained through the Stores Department.

In conclusion the Secretary of State approved the recommendations of the committee and requested the Government of India to issue the requisite instructions for carrying them into effect. The main points in the extracts of the committee's report were :—

- (a) They were impressed with the importance of doing all that is possible to diminish the demands made by India for stores to be sent from England and to stimulate the development of a local system of supply in India. The conditions under which the present system arose of requiring all articles that have to be purchased in England to be supplied through the Store Department of the India Office were, to a considerable extent at least, obsolete.
- (b) The introduction of provincial responsibility for local expenditure justified, if it did not require, a considerable relaxation of the present rule, irrespective of the general grounds of policy that suggested the propriety of encouraging the growth, both of truly local sources of supply and of a system of local agency for supplies not of Indian origin, in substitution of the centralised agency of the Store Department of the India Office.
- (c) While all special machinery and appliances, such as engineering, railway and telegraph plant and material, would almost necessarily be obtained through the Store Department, a considerable proportion of miscellaneous stores might be got from local sources at reasonable prices, due care being taken to secure a satisfactory quality.
- (d) As to the extended resort to sources of indigenous origin for stores in substitution for articles obtained from England, all that the committee could usefully do was to support the proposal that the Government of India should be strongly urged to give special attention to the subject. The committee remarked that through the extension of existing government establishments—such as the tannery at Cawnpore—might be suggested among other means of attaining the object in view, it was much more to be desired that the independent action of private persons or firms should be encouraged and developed, and this could only be accomplished by giving to such persons or firms a fair amount of orders.

Rules of  
1878—Stores  
to be  
obtained  
through  
Indian  
Agents.

5. The Government of India accordingly, in Financial Resolution No. 912, of 16th February 1877, consulted the Military, and Public Works Department and local Governments in regard to rules and restrictions which might be expedient to lay down in substituting local purchase of certain stores for the agency of the Store Department of the India Office. On receipt of replies the Government of India in the Finance Department issued Resolution No. 3947, of 8th November 1878, which was briefly as follows :—

The Governor-General in Council observes that the following stores should still be obtained from Europe :—

- (i) Special machinery and appliances including railway plant and material for construction or working of telegraphs, railways, or other engineering works which cannot be advantageously procured in India.
- (ii) For the Army.
  - (a) Malt liquor, clothing material for European troops, and other European manufactures required on so large a scale as to be beyond the resources of local markets.
  - (b) Military supplies of a special nature, usually obtained from the War Office, or the Admiralty, or from contractors working under their supervision.
- (iii) For the Indian Marine.—As for the Army.

(iv) Writing paper of European manufacture, so as to secure uniformity and durability in public documents (but, conditional on uniformity, local Governments may obtain all paper of European manufacture, excepting loan and water mark paper, from local contractors).

(v) Stamps.

(vi) Medicines, but local Governments may buy medicines in the local market if paid for from provincial funds.

It is to be borne in mind that the object is to relieve the Store Department of the India Office of petty detail and that indents on that Department are to be confined, as far as possible, to the few articles of large expenditure which may not be obtainable through local agency of a satisfactory quality, or without undue extra expense or inconvenience.

The following articles are to be obtained, as far as practicable, independently of the India Office by local purchase or direct from Europe, or America from manufacturers or through private agents.

(a) books and periodicals.

(b) type and printing materials.

(c) stationery of all kinds except that as provided for in (iv) above.

(d) all other civil stores except the marine stores as in (iii) above.

In respect of the above rules the Governor-General in Council observes that the changes now ordered are not suggested with a view to direct saving in the actual cost of stores; their object is to relieve the Store Department of the India Office of petty detail and to reduce the disbursements of the home Treasury for Stores which are expended in India.

A copy of this Resolution was forwarded to the Secretary of State with Despatch No. 437, of 14th November 1878. As an example of the thoroughness with which the Government of India intended these changes to be carried out a Resolution in the Finance Department No. 3950, of 8th November 1878, was issued, directing that the Surveyor General should obtain his supplies for 1879-80 as far as possible independently of the India Office Store Department and commenting on the necessity of obtaining instruments and chemicals and materials for photographic and lithographic work through that department.

6. In despatch No. 94 of 13th March 1879, the Secretary of State considered the above quoted Resolution No. 3947 of 8th November 1878, by the Government of India for the provision of European stores otherwise than through the agency of the India Office. He observed that the Resolution was in general accordance with the views expressed in Lord Salisbury's Financial Despatch No. 477 of 7th December 1876, relative to the expediency of encouraging the local supply of stores. He directed that the special attention of local Governments should be drawn to the importance of substituting local manufactures for European articles even at some temporary increase in cost.

Secretary of  
State accepts  
the 1878  
rules.

As regards the provision of stores not produced in India, the practice of dealing with merchants or agents on the spot should be adopted rather than that of issuing direct orders for the supplies to persons in England; but, when it was impracticable to procure stores from Europe through local agencies to be paid for in rupees in India, the existing system of indenting through the India Office was not to be departed from.

7. The Government of India in Despatch No. 288 of 8th September 1879, pointed out that employment of a local agency for the importation of foreign stores and payment in rupees in India, as opposed to dealing direct with the foreign supplier might lead to sacrifice of public money, and asked the Secretary of State to reconsider the orders on this point, and to allow the instructions contained in their Resolution No. 3947, of 8th November 1878, to remain in force.

Payment in  
India may  
not be ad-  
vantageous.

Return to  
policy of  
1862 with  
limited local  
purchase.

8. With Despatch No. 166, dated 27th May 1880, the Earl of Kimberley forwarded reports by the Director General of Stores, and by the Inspecting Engineer for State Railways and Engineering Supplies, India Office, on the question of direct purchase. Both these officials were strongly averse to the purchase of European stores other than through the organised agency of the Store Department of the India Office.

The Secretary of State considered that the objects aimed at by Her Majesty's Government had been imperfectly appreciated. These objects were :—

- (a) reduction of the amount of bills drawn by the Secretary of State in Council against the Government of India by encouraging local purchase of, and payment for, anything the local market could supply ;
- (b) economy in India by a system of cash payments by local authorities ;
- (c) fostering the development of local industry.

The language of the special committee of 1876 might not have been so clear as was desirable, and it was not intended that local governments should be free to substitute for the agency of the Store Department, either directly or indirectly, that of some firm in England, nor was it intended that any firm should be constituted as agents in India for the purchase of stores. He desired that orders might be issued that when stores were of such a nature that they had to be purchased in England, there should be no departure from the system of forwarding an order on the Store Department of the India Office, which was the proper agent for the purchase of stores in England: that the purchase in the local market of such special stores as railway plant and material should be limited to articles usually procurable in the local market, and not extended to purchases in England either directly or through agents: and that it should again be announced that it was the wish of Government to give the utmost encouragement, consistent with the true economy, to the supply of articles by the local market.

Rules of  
1880.

9. The Government of India accordingly issued Resolution in the Finance Department No. 3574 of 3rd November 1880, relative to the supply of articles of European manufacture required for the public service in India.

The principal rules were :—

- (i) All European articles other than books, newspapers, etc., shall be obtained by indent upon the Secretary of State, and, save as hereinafter provided, must not be bought in India, or direct from Europe, independently of the India Office.
- (ii) European articles, procurable in the local market, which can be purchased after inspection and paid for on delivery, may be bought in India, with the previous sanction of the Government of India, or local government as the case may be,
  - (a) when it is more economical to do so ;
  - (b) when inconvenience to the public service is anticipated by delay in supply of stores indented for from England ;
  - (c) when articles are of a perishable nature.
- (iii) The utmost encouragement consistent with true economy should be given to the supply of European articles by the local market ; and whenever it is possible to do so even at some temporary increase of cost, articles of manufacture, or of indigenous origin should be substituted for European articles.

This Resolution was forwarded to the Secretary of State by the Government of India under their No. 366, of 9th November 1880.

Resolution of  
1883. Policy  
of encourage-  
ment of local  
manufac-  
tures.

10. The next Resolution was that issued by Lord Ripon's Government in 1883 (Resolution No. 185, Finance Department of 10th January 1883).

This was a very comprehensive document, recapitulating the existing rules and the method of submitting the annual statements

required by the Secretary of State. Among the appendices was one giving a list of articles which were procurable of Indian manufacture and the firms from which they were procurable. It contained a very definite pronouncement by the Government of India on the subject of encouragement of local industries. In view of its importance it will not be out of place to give somewhat full extracts.

*Paragraph 2.*—All articles required for the public service which cannot be manufactured in India are, as an almost invariable rule, to be obtained by indent on the Secretary of State. The Store Department of the India Office constitutes a special agency, which is maintained for the express purpose of purchasing stores in England on behalf of the Government of India save in the special cases hereinafter mentioned. Stores of European manufacture must not be bought in India or obtained direct from Europe independently of the India Office.

*Paragraph 3.*—The special cases, in which with previous sanction of Government of India or of local governments as the case may be, stores of European manufacture may be obtained in India are :—

- (i) when for any special reason it may be more economical to do so;
- (ii) when stores indented for from England have not arrived and inconvenience to the public service is anticipated from delay in the supply;
- (iii) when the articles are perishable;

*Paragraphs 4 to 11* deal with the method of submission of indents. The established proportion is to be taken as three years' supply and is to be based on the average of the previous three years' consumption.

*Paragraphs 12 to 19* deal with the supply of books, newspapers, etc., which are exempted from the general rule and are to be obtained by direct orders to agents or publishers in Europe or America. Parliamentary papers are to be obtained from the Secretary of State.

*Paragraphs 20 and 21* deal with preparation of annual estimates for stores.

*Paragraphs 22 to 27* give detailed instructions for the returns of expenditure on stores required by the Secretary of State in order that he may observe the financial effect of the change in the mode of obtaining stores by substitution articles of local manufacture for imported stores.

*Paragraph 28* reads as follows :—

"The orders of the Secretary of State make it incumbent on all officers of Government requiring stores of European manufacture to obtain them by indenting on the Secretary of State, and permit of purchases in the local market of articles made in Europe and America only under the special circumstances mentioned in paragraph 3 of this resolution."

"The Governor-General in Council, therefore, desires again to invite the special attention of local governments to the expediency of supplying the wants of Government by the purchase in the local market of articles of *bona fide* local manufacture. The Government of India is desirous to give the utmost encouragement to every effort to substitute for articles now obtained from Europe, articles of *bona fide* local manufacture or of indigenous origin, and where articles of European and of Indian manufacture do not materially differ in price and quality, the Government would always be disposed to give preference to the latter, and the Governor-General in Council desires to remind all officers of Government that there is no reason why articles manufactured in

India should not be obtained locally, even although the raw material necessary to their manufacture may have been originally imported from Europe. It is most important to bear in mind the distinction between articles of European manufacture and articles produced, or worked up in India from imported material; the former should not, save in exceptional cases, be purchased in the "local market," while the latter should by preference be purchased locally whenever the quality is sufficiently good, and the price not higher than the cost of laying down the imported article. There are many articles which may not be immediately obtained in the local market, but which can be made in the event of Government encouraging the manufacture."

*Paragraph 29* refers to the appendix enumerating articles of Indian manufacture so far as have yet been ascertained by the Government of India.

Finance  
Committee in  
1886 recom-  
mend a  
Director  
of Stores.

11. In July 1886 the Finance Committee submitted to the Government of India a note containing proposals for effecting economy in, and securing due control over, the purchase of stores required for Government service in India.

They noted (in detail) the following expenditure in thousands of rupees.

	1882-83.	1884-85
Value of stores purchased through Sec- retary of State. ...	Rs. 1,43,90	Rs. 1,90,79
Value of imported stores purchased in India. ...	40,86	65,18
Value of stores manufactured in India.	39,42	70,71

They pointed out that the expenditure on stores represented a very large item in government expenditure. The total expenditure in England and India during the years under review was (in thousands) Rs. 2,24,19 and Rs. 3,26,69, respectively, while the expenditure in India alone was Rs. 80,29 and Rs. 1,35,90. They considered that sufficient attention was not given to the rules contained in Government Resolution No. 185 of 10th January 1883, and that European stores were freely brought in India with resulting loss to government in their estimation of 20 per cent. They observed that the Secretary of State had drawn the attention of the Government of India to this point from time to time.

They, therefore, concluded that the supervision in India with regard to store indents was insufficient and they made the suggestion that there should be attached to the Government of India in the Finance Department an expert official to supervise the execution of all store indents reporting periodically to Government the result of his acts and observations. They said it was clear that Government must suffer considerable loss from the delay in complying with indents. They failed to see any necessity for demands of an ordinary nature being dealt with in any way at the India Office except by officers of the Store Department, who should, in the matter of purchase of stores, be considered as servants of the Government of India. An examination of the causes of delay and faulty compliance with indents suggested to them the expediency of the Store Department of the India Office being brought in whole, or in part, under the direct control of the Government of India.

Proposal to  
subordinate  
Director  
General  
of Stores to  
Government  
of India.

12. The Government of India in addressing the Secretary of State (Despatch 256 of 27th September 1887) on the matter made the following observations:—

- (i) They were satisfied that they could as a general rule buy European stores at a smaller cost through the agency of the India Office Store Department than through any other agency, especially in regard to railway stores.
- (ii) The expenditure in India on European stores was very large, but to a large extent unavoidable; in the case of railway works no amount of foresight could prevent large demands arising for articles of European manufacture.

(iii) The purchases of European stores in India would be largely reduced, and would not be made except in cases of real urgency, if the system of supply by the India Office were as unobjectionable in other respects as it was in the matter of price and quality of articles supplied. Several objections did exist in the system as then worked, and they were convinced that the removal of these objections was a necessary preliminary to a stricter enforcement of the rules.

(iv) The most important objection, on which there was practical unanimity on the part of indenting officers, was dilatoriness in execution of indents resulting, necessarily, in a multiplication of local purchases.

(v) They agreed with the Finance Committee that the requirement of the Secretary of State's sanction to each indent was a cause of material delay amounting in almost every case to a month.

(vi) There appeared to be great delay in calling for tenders and giving out contracts and they could conceive no reasons which would justify such delays. They recommended the Indian plan of inviting periodical tenders for small stores and supplies in constant demand; and also suggested a more prompt delivery of stores after contracts had been given out.

(vii) Another objection, which existed in the system in force, arose out of the attitude which the Store Department had been permitted to assume both toward the Government of India and indenting officers. Much of the advantage to be derived from an agency for purchase of stores in England was lost through the independent attitude assumed by the Store Department. The head of the Store Department should understand that he was the agent of the Government of India and responsible not for the propriety of their proposals but for the prompt execution of their orders.

(viii) They claimed that if the Store Department were made thoroughly efficient in the points noticed, if orders were promptly executed and if the Department occupied the position of an agent so that officers might be reasonably certain of obtaining the articles for which they had indented, they would be in a position to deal effectively with the purchase of European stores by prohibiting purchase in India except in cases of real urgency. They proposed that controlling officers should be allowed to sanction local purchases of European stores under certain other conditions besides urgency.

(ix) Finally, they did not endorse the proposal of the Finance Committee for the appointment of a Director of Stores for the whole of India. They recognised the advantage as far as the Public Works Department was concerned in having one purchasing authority at the presidency towns and at Karachi and, as the port storekeepers were already recognised as a channel for such purposes as far as railways were concerned, they proposed issuing orders under which the port storekeepers would be more fully utilised by all Public Works Department officers as their agents for purchase of all articles whether of European or local manufacture.

These orders were issued by Resolution No. 327-A. G., of 21st December 1887, in the Public Works Department.

13. The reply of the Secretary of State was contained in his Despatch No. 191 (Financial), dated 26th July 1888. He stated that he had satisfied himself that considerable improvement had lately been effected in the working of the Store Department and that no pains would be spared to bring about further improvements as opportunity might occur.

Director  
General of  
Stores to  
remain  
subordinate  
to Secretary  
of State.

In respect, however, of the Government of India's remark that the Director General of Stores should be considered as the agent



of the Government of India, he considered it would be more correct to describe the Government of India as being in these matters the agent of the Secretary of State. Under the Act for the Better Government of India, the expenditure of the revenues of India both in India and elsewhere was subject to the control of the Secretary of State and was incurred upon his responsibility. It was only by his delegation to the Government of India of a portion of the power entrusted to him, which he did with complete confidence that it will be well exercised, that it was possible for the Government of India to purchase stores with that freedom from minute check essential to the prompt despatch of business in India. It would, however, be entirely contrary to the spirit of the Act if the Secretary of State were to divest himself of the control over the officer in Great Britain whom he had appointed to manage the purchase and despatch of stores for India and for all of whose acts he alone was responsible to Parliament. It was further necessary for him to point out that for any interference with the literal execution of indents, it was the Secretary of State in Council who was responsible and not the Director General of Stores.

The Secretary of State went on to say that the supply of all minor articles might be accelerated by the constitution of depôts for such stores at the five great ports in India. He accordingly suggested that the supply of stores from England might be reconsidered in conjunction with utilisation of services of port storekeepers) from this point of view with the intention of amalgamating indents for simultaneous purchase in England and subsequent despatch to the ports for distribution. Although he observed that the Government of India doubted the expediency of appointing a Director of Stores in India, he was, however, disposed to think that a valuable check on all transactions, particularly in respect of the economical purchase of stores locally, might be secured under the control of some such superior officer and he desired to commend this arrangement to the further consideration of the Government of India.

He contended that it would be an abuse of the rules allowing purchase of European stores if want of forethought or care in preparing indents for stores, which ought to be obtained from England, made it necessary to have recourse to purchase in India. True economy demanded that purchase in India should be limited to articles produced or manufactured in that country at a price which compared favourably with similar articles of European manufacture.

Government of India ask for permission to purchase locally in emergencies.

14. The Government of India replied in their Despatch No. 319 of 25th December 1888, that the question of appointment of a Director of Stores would receive their further consideration, and that, if they were not able to satisfy themselves that such an appointment was necessary, they might possibly go as far as to adopt the suggestion of utilising port storekeepers for such a duty and of placing under their care a small depot of railway and public works stores in general use.

In regard to the question of local purchase of European stores in India they asked that the second rule might be amended as follows:—

“When stores indented for from England have not arrived or when a sudden emergency has arisen and serious inconvenience to the public service is anticipated from the delay which would occur if an indent for the stores required were sent to England.”

Secretary of State agrees to local purchase in emergencies. 15. The Secretary of State in his Despatch No. 46 (Financial), dated the 28th February 1889, agreed with the Government of India that rule 2 should be relaxed in case of sudden emergency but that it should be made clear that mere non-arrival of stores indented for was not to be treated as reason for local purchase.

The amended rule was to read:—

“When stores indented for from England have not arrived or when a sudden emergency has arisen, and in either case only if serious inconvenience to the public service would be caused by waiting for the stores from England.”

This amendment was issued under Finance and Commerce Resolution No. 2586 of 23rd May 1889.

16. In despatch No. 146 (Financial) of 4th July 1889, the Secretary of State transmitted for the information of the Government of India the 1st and 8th reports of the special Committee on home charges issued in July 1888 and January 1889.

Committee on Store Department, India Office, 1888.

The reports dealt with the question of purchase of stores and an examination into the organisation of the Store Department. Taking the figures for the year 1887-88 they found that the cost of the Store Department (including £12,113 for Consulting Engineer's fees and expenses) was £73,212 against a total expenditure of £2,327,978, i.e., 3.15 per cent. This total, however, included freight £193,180 and £56,728 for arms and clothing taken by troops.

The cost of the material inspected by the Consulting Engineer was £910,906 the cost of inspection being 1.330 per cent.

The value of stores actually inspected by the Store Department, excluding £118,055 for stamps and malt liquor for which special arrangements were made, was £335,136; and the net cost of the India Store Department £61,129. Deducting payment for inspection of all kinds both by the Store Department and by other government departments, the cost of purchase agency work, arranging shipment, etc., was found to be £45,874 or 1.971 per cent.

17. In their despatch No. 126 of 6th May 1890, the Government of India laid before the Secretary of State their views on the appointment of a Director of Stores in India. They did not consider that any single person could exercise a better control over local purchase than was exercised by the various heads of departments, and, having regard to the enormous area over which his control would extend, they were of the opinion that the time entailed in the scrutiny of indents would make the scheme so unworkable that officers would be forced to choose between a departure from the rules at serious consequences to themselves, or delay in completion of works. Neither did they consider the amalgamation of indents in India by such an officer to be feasible.

Appointment of Director of Stores in India considered.

As regards store depôts at ports they had considered the question from the aspect of railways, who would be the largest users. They pointed out that, whatever system was adopted for state railways, guaranteed railways, however constructed, must be allowed to make their own arrangements. That as far as state railways were concerned each was served by a different port hence each line would in effect still have its own reserve depôt, which it was the special object of the proposed system to prevent.

Their general conclusion on the whole question was that the appointment of a Director of Stores was not required for the following reasons:—

- (1) Such an appointment with the necessary office establishment would cost a considerable annual sum and its tendency would be to increase.
- (2) It would be almost impossible to find an officer combining the necessary qualifications, or if found to replace him. The result would probably be that experts in various branches would be called for.
- (3) As regards local purchases this interference would be productive of no practical good.
- (4) The proposed amalgamation by him of indents on England would also lead to great delays and thus increase what was considered to be the greatest evil in connection with the supply of stores from England.
- (5) No general depôts of railways stores are required in the present circumstances of state railways in India and his intervention in the case of line depôts would be useless.

18. The Secretary of State in his despatch No. 191, (Financial) of 4th September 1890, agreed to abandon the proposal for the appointment of a Director of Stores in view of the strong objections raised by the Government of India.

Secretary of State abandons proposal.

19. In their despatch No. 65 of 5th March 1889, the Government of India, in forwarding an application from Messrs. Richardson and Cruddas of Bombay for permission to tender for the supply of bridgework, girders, etc., made up in India from

Proposal to relax rules prohibiting local purchase of steel articles.

imported bars and plates, gave it as their opinion that the prohibition of purchase in India of articles made of iron and steel should be relaxed, as far as bridgework, girders, iron roofing, etc. were concerned, provided that proper arrangements could be made for inspection of the material to be used and of the finished structure.

Secretary of State not in favour of proposal.

20. Lord Cross replied in Despatch No. 161 (Financial) of 25th July 1889. While concurring in the desirability of encouraging local supply, he was of the opinion that the practical difficulties in providing for adequate inspection in India for contracts for bridgework, etc., were great, and he enclosed for the attention of the Government of India a report made by his Consulting Engineer—Sir A. Rendel—on the quality of iron imported and its inspection. He thought that rejections for defective material and workmanship would prove both ruinous to contractors and injurious to Government and that, as recognised in the despatch under reply, the absence in India of mechanical and chemical appliances for testing iron and steel would add greatly to the difficulties of inspection. Nor could he lose sight of the consideration that the economical advantages secured by free competition would be lost owing to the limited number of capable firms in India. Before coming, however, to any decision in the matter he would be glad to know how the Government of India proposed to overcome the difficulties referred to. He would then be prepared to consider any suggested arrangements under which such extension of the manufacture of iron work could be brought about.

Government of India recommend appointment of inspectors.

21. The Government of India in their despatch No. 338 of 15th October 1890, transmitted to the Secretary of State a memorial signed by Messrs. Richardson and Cruddas and 34 other firms, and representations from the Government of Bombay and from the Chambers of Commerce at Madras and Karachi, in favour of some relaxation of the restrictions imposed on the purchase of supplies of iron and steel work in India. They said that it was evident from the papers forwarded that there was a very widespread feeling among iron manufacturers in India that their operations were unduly hampered by the prohibition of orders on behalf of Government. That there was some force in the argument, advanced in paragraph 6 of the memorial, that whereas on the one hand every encouragement was given by Government to the development of technical education, on the other hand the rules restricted the employment of those who had been educated in the technical institutes which had been established. This consideration lent weight to their opinion that, if proper safeguards could be introduced, some relaxation of the existing rules restricting local manufacture of iron and steel were eminently desirable. They proceeded, therefore, to consider how the difficulties mentioned by the Secretary of State could best be met; their proposals summarised were as follows:—

*Firstly.*—As regards inspection, as we cannot hope at present to obtain competent inspectors in India we propose that two qualified inspectors, thoroughly acquainted with the system obtaining at the India Office should be engaged on regular covenants to serve in India for not less than 5 years.

These men would be stationed at Bombay and Calcutta, and would make inspections elsewhere as required and train other men so that India might eventually obtain a competent staff.

*Secondly.*—As regards delay that might be expected to arise in consequence of rejection of material, we are disposed to consider this fear to be exaggerated by Sir A. Rendel, since it will not be to the advantage of local firms competing for government orders to import inferior material; but that this is a question to which experience alone can furnish a conclusive answer.

*Thirdly.*—As regards testing, there are many objections to testing in England, as suggested by Sir A. Rendel, material to be made up in India and complications would arise if rejections were made in India of material passed by the Home inspectors; on the whole we do not consider that this condition is one that can fairly be imposed on Indian manufacturers. There are a few testing machines in India and firms are prepared to provide the necessary testing machinery.

*Fourthly.*—As regards the economical dangers liable to result from the absence in India of free competition we are of opinion

that the scheme should not be allowed to drop on account of this fear. If the manufactured materials required can be obtained at about the same price and as good as if imported from England, there are undoubted administrative and economic advantages in procuring them in India. It is not necessary that every piece of iron work should cost no more than if imported from England, and if, on the whole, the scheme is likely to give satisfactory results it is in our opinion worth a trial.

The despatch went on to state that they had had under consideration the question of some limitation on the powers of local governments to give orders for local manufacture either in the form of a money limit, or, in cases of bridges, of a certain length of span, or a combination of both. On the whole, however, they were of opinion that no such restriction was necessary. They would explain to local Governments that the proposed relaxation of the rules applied generally to isolated works only and that large indents, such as those for the complete anticipated requirements of railways under construction, must continue to be sent to the India Office.

In conclusion they observed that the main preliminary feature of the present proposals was the appointment of the two competent inspectors and they requested that early steps should be taken to secure their appointment if their views commended themselves to the Secretary of State.

¶2. Lord Cross in reply (Despatch No. 3-Financial of 8th January 1891) stated that it was with pleasure that he received the information afforded in the papers of the great progress made in recent years in the manufacturing industry of India and that he was desirous of taking any steps which might be conducive to its encouragement if not opposed to the general principles regulating the supply of European goods for the service of Government. Before, however, acting on the proposal made by the Government of India, that two qualified inspectors should be appointed by the Secretary of State to overcome the difficulties arising from the necessity for proper inspection, he wished the Government of India to consider carefully the observations in notes by the Consulting Engineer and the Assistant to the Director General of Stores.

Secretary of State sends reports by Director General of Stores and Consulting Engineer.

On the general question, however, it was left to the Government of India, after consideration of the above papers, to adopt such measures and impose such limits as they might consider desirable for the purpose of giving fair and thorough trial to the experiment of obtaining in India articles made of iron and steel manufactured locally. Care was, however, to be taken to guard against any supposition that these measures were adopted in any other interests than those of economy and against any claim for the protection of local industry, or for compensation in event of its being found necessary to discontinue the practice of inviting tenders in India.

Sir A. M. Rendel, the Consulting Engineer, considered that, except in respect of boilers or engines, the workmanship in India was equal to the ordinary requirements of railways, but that the difficulties in the way of supplementing English with Indian labour were:—

- (i) That India was not a metal producing country.
- (ii) Danger of work contracted for in India going into bad hands.
- (iii) The danger from want of competition, of getting an article not only inferior to, but more costly than, the English one.

As regards the first objection the advantage to Government in point of cost would not be in proportion to the value of the goods ordered, and he reckoned that taking the articles named in an appendix to the despatch half their value would be for material and transport which must be paid for in England. As regards the second objection he suspected that a large number of those whose names were attached to the memorial would be found on enquiry to be incompetent to execute work, or to be more or less agents for English manufacturers. The third objection he thought could be got over by comparison of prices, or in more important cases by

simultaneous tenders. In regard to inspection he did not think the plan of sending out two inspectors necessary at present. He thought too much time would be occupied in travelling and that the heat for six months in the year would militate against efficient work and that the appointment of such officers at present would shew that Government had adopted a policy of preference.

The memorandum by the Assistant to the Director General of Stores dealt with the delay that might occur in comparison of prices and the objections to the Government of India paying consistently more for their stores than if procured from England. He considered the most important objection to the appointment of the proposed inspectors was that, in absence of any organised inspection department, they would not be subject to adequate supervision and control.

**Resolution  
of 1891.**

23. The Government of India after due consideration of the problem in all its bearing issued Resolution No. 2650, in the Finance Department, dated 25th June 1891.

This Resolution commenced by laying down the policy of Government in respect of purchase in India of articles of local manufacture and reproduced in full in paragraph 28 of Resolution No. 185 of 10th January 1883; this was followed by a recapitulation of the circumstances permitting local purchase mentioned in paragraph 3 of the same Resolution as amended by Financial Resolution No. 2586, dated 23rd May 1890, viz.,

- (1) when for any special reason it may be more economical to do so,
- (2) when stores indented for from England have not arrived or when a sudden emergency has arisen, and in either case only if serious inconvenience to the public service would be caused by waiting for the stores from England,
- (3) when the articles are perishable.

The Resolution went on to state that some misconception appeared to have arisen regarding the application of paragraph 28 of Resolution No. 185 of 10th January 1883. The term "raw material" used therein,—the import of which from Europe for the purpose of being worked up into finished articles had been declared to be unobjectionable—had been held in some quarters to apply to bars and plates of iron and steel to be made up into bridges, roofs and other engineering structures. This, however, was not the purpose of the Resolution. It was considered by the Government of India that manufactured articles of iron and steel were classes of stores to which the objections to local purchase applied in the highest degree mainly on the grounds:—

- (i) that much of the material imported into India was of inferior quality;
- (ii) that delays would occur even in England on account of rejection of material;
- (iii) absence in India of the necessary mechanical and chemical appliances for testing iron and steel;
- (iv) loss of economical advantage secured by free competition which was unobtainable in India owing to the limited number of capable firms.

On these grounds the purchase in India of manufactures of iron and steel had been prohibited except under the special circumstances mentioned above. Having regard, however, to the representations made, and with a view of encouraging local industries and the development of technical education, the Governor-General in Council had now resolved as a tentative measure to modify the existing rules prohibiting the local purchase of articles of iron and steel manufactured from imported material. It was to be clearly understood that the relaxation of the existing rules was sanctioned solely in the hope of effecting economy in public administration both by actual saving in cost and by avoiding delay and that it was not intended to sanction thereby a procedure in any degree of a protective nature.

Accordingly in the annexure to the resolution was given a list of articles for which, in the opinion of the Governor-General in Council, tenders should be invited in future from local firms. The relaxation of the rules regarding local manufacture was to be

limited to the less important supplies, *i.e.*, bridges and roofs of small span for the public works department, in the case of railways under construction the whole of the necessary supplies, as far as could be foreseen, were to be procured as heretofore by indent on the Secretary of State.

The Resolution went on to state that the following restrictions must be rigidly enforced :—

- (1) That the articles locally supplied are not to have been imported into India in a finished or partly finished state.
- (2) That the price is not to be in excess of that at which similar articles can be obtained by indent on the Secretary of State.
- (3) That the quality is not to be inferior to English supplies.

In order that only those firms, whose shops were fitted with the necessary plant should be allowed to tender, local Governments were to furnish the Government of India with a list of firms whom they considered to be entitled to the privilege of tendering and it was laid down that Siemens, Martin or Bessemer steel of English make should be used; the use of basic steel, or foreign steel or iron in any form, was prohibited; and samples of all raw material were to be subjected to test.

24. In Resolution No. 226-M., dated 14th June 1892, the Government of India re-stated the conditions as regards the tests to be applied to raw material and, when necessary, to the finished product, and again drew attention to the reasons which induced Government to relax, as a tentative measure, the rules previously in force. To it was appended a list of firms recommended by local Governments and a set of specifications shewing the conditions as regards test and manufacture prescribed by the Director-General of Stores, India Office, in the case of iron and steel work procured from England.

Resolution of  
1892.

25. In Financial Resolution 1426-S.R., dated 25th March 1895, the question was again reviewed. It was believed, that the manufacture in India of the articles alluded to, had extended and that many engineering firms now possessed the apparatus necessary for testing the raw material and the finished product, and that it was possible indenting officers were not aware of the full extent to which the orders permitted them to supply themselves from Indian sources.

Resolution of  
1895.

Government desired, therefore, once more to draw the attention of local Governments to the subject and invited them to submit names of other firms whom they considered qualified to be entitled to tender, and also to submit the names of additional articles which in their opinion might be included in the list of those which would be suitably made in India.

This Resolution was embodied in Public Works Department Code, Volume II, 5th Edition, as Standing Order No. 45, dated 18th July 1895.

26. In despatch No. 15 (Financial Stores), of 21st November 1895, the Secretary of State transmitted to the Government of India two representations on behalf of certain manufacturing firms and iron founders established in India, urging some relaxation of existing restrictions on purchase of ironwork in India.

Certain firms  
interview the  
Secretary of  
State.

The Government of India replying in their Despatch No. 65 of 11th March 1896, pointed out that the conditions under which such stores could be purchased were laid down in their Resolution in the Finance and Commerce Department No. 146-S. R., of 25th March 1895, and were to the effect :—

- (a) That the articles locally supplied were not to be imported into India in a finished or partly finished state.
- (b) That the price was not in excess of that at which similar articles could be obtained on indent from the India Office.
- (c) That the quality was not inferior to that of English supplies.

Although the firms complained that the relaxation of existing restrictions ordered in Resolution No. 2450 of 25th June, 1891 was meagre and took specific exception to the limitations imposed by the concluding sentence of paragraph 4 of that Resolution they had not indicated in what particular respects they desired a further relaxation of the rules.

The conditions set forth in the Resolution of 25th June 1891, and re-stated in the Resolution of 25th March 1895, were prescribed under the orders contained in paragraph 5 of Lord Crewe's Despatch No. 3 (Financial) of 8th January 1891, and were duly confirmed and approved in his Despatch No. 208 of 29th October 1891. In the circumstances it was impossible for the Government of India to take any action.

Subsequently, however, the Government of India were furnished by the Engineering and Iron Trades Association with a list of the items which local firms were prepared to supply to government specifications. The Association stated that the restricting clause to which special exception was taken was that contained in paragraphs 4 and 2 respectively of the Resolutions of 1891 and 1895 and was as follows:—

"The relaxation of the rules will refer only to articles the certain want of which could not be anticipated, and delay in supply of which would involve loss in some respects."

Draft  
resolution  
referred to  
Secretary of  
State.

27. The Government of India were now in a position to reply to the Secretary of State's Despatch No. 15 (Financial) of 21st November 1895. In despatch No. 282, of 14th October 1897 they stated that after careful consideration they had decided that the list of articles of iron and steel manufactured in India from imported material which could be purchased locally should be considerably extended, and that the condition to which manufacturers had taken exception should be dispensed with. They requested the Secretary of State's approval to a draft resolution which they enclosed.

Resolution of  
1898.

28. The Secretary of State's sanction was accorded in Despatch No. 5 (Financial) of 7th April 1898, and Resolution No. 2587-S.R., of 9th June 1898, was issued in the Finance and Commerce Department. This Resolution, after citing the previous Resolutions on the subject, stated that the Governor in Council had decided:—

- (i) that the list of articles of iron and steel, manufactured in India from imported material, which may be purchased locally may be considerably extended;
- (ii) that the condition limiting such purchases to articles the certain want of which could not be anticipated and the delay in the supply of which might involve loss, may be dispensed with;
- (iii) that articles for state railways under construction and first equipment of large engineering projects should continue to be supplied by indent on England as a general rule in absence of express permission of the Government of India to purchase locally;
- (iv) that in all other cases articles of the description given in Appendix A attached may be procured as required in India subject to the following restrictions:—
  - (a) That selected firms only are permitted to tender.
  - (b) Firms are to state names of makers from whom iron and steel have been imported and the nature of material.
  - (c) Raw material and manufactured articles are to pass tests in Appendix C.
  - (d) Articles supplied as of local manufacture shall not have been imported into India in a finished or partly finished state.
  - (e) Price is not to be in excess of similar articles of equal quality which could be obtained by indent on Secretary of State.
  - (f) Quality of the manufactured article is not to be inferior to that of English supplies.

The Resolution contained:—

- (a) A list of articles that might be made up in India from imported raw material;

(b) a list of approved firms;

(c) a specification for wrought iron and steel work;

and was reproduced in Public Works Department Standing Order 172 of 7th September 1898.

29. The practical effect of this Resolution was, however, inconsiderable as was pointed out to the Government of India by the Iron and Engineering Trades Association in 1899, and as a result of this representation Government issued a circular letter No 6 P. W., of 16th June 1899, in which they desired that all indents should be carefully scrutinised before transmission to the India Office with a view to judging whether articles were not "occasionally indented for from the Secretary of State which it would be more economical and satisfactory to buy in this country".

Resolution of 1898 of small effect.

30. In the following years there was a considerable amount of correspondence on account of the great delay in the supply of stores from home, and after addressing local Governments and departments the Government of India sent a Despatch to the Secretary of State (No. 7. P. W., of 12th March 1903) on the subject.

Proposal for increased powers of local purchase.

They commenced by saying that they had on several previous occasions addressed him on the subject of purchasing English stores with a view to reducing the time taken for supply. That being aware that considerable delays still occurred they had asked all local Governments and Administrations to report cases in the last five years in which:—

(a) articles of inferior quality had been supplied through the India Office;

(b) the articles supplied had differed from the specification in the indent;

(c) the prices paid by the India Office had been regarded as excessive;

(d) there had been a delay in supply;

(e) the grounds of dissatisfaction did not come under any of the preceding heads.

They had received and considered the replies and found that in respect of (a), (b), (c), and (e), there were comparatively few complaints and in respect of (d) there had been but few from the Stationery, Mint, Military and Marine Departments. These departments as a rule maintained large stocks. The articles they required were generally of descriptions that could readily be obtained from manufacturers and the annual demand was fairly steady.

The case, however, was very different with the reports received from the Public Works Department (which included railways). Here again there were comparatively few complaints in respect of cases (a), (b), (c), and (e), and they did not consider them more numerous than might have been expected. In case (d), however, there had been many cases of delay of which a few typical ones, not previously reported, were enumerated. They assured the Secretary of State that there was a unanimous consensus of opinion among all the officers of this important department that very great delays took place in the supply of stores required by them and that the consequent inconveniences and extra expense stood in urgent need of remedy.

They considered that this time reckoned from date of receipt of an indent in England to that of the receipt of stores in India might be reduced in the case of urgent indents from "over three months" to "two months" and for ordinary indents from "ten months" to "three to four months", and that if a longer time was still necessary for the supply of ordinary stores it would be for local Governments to exercise more fully the powers they possessed for authorising the local purchase of stores. They considered that the limit of powers of officers of the Public Works Department (excepting managers of state railways) to purchase English stores locally (*viz.*, Rs. 50) was far too low and they were considering the advisability of revision.

The rule, based on paragraph 5 of Lord Cross' Financial Despatch No. 46 of 28th February 1889, which in its present form absolutely prohibited the purchase of English stores by means of orders given to agents or firms in India, required revision and they considered that when exceptional cases of emergency arose, they



should have power to sanction such purchases without reference to the Secretary of State. They proposed to revise Appendix 30 of Volume II, Public Works Department code (rules for purchase of stores) in the sense of the above remarks.

Secretary  
of State  
approves  
extended  
powers  
of local  
purchase.

31. The Secretary of State in Despatch No. 3 P. W. (Stores), of 29th May 1903, observed with satisfaction that after prolonged and exhaustive enquiry the Government of India had no serious complaint against the Store Department except in respect of delay in supply of stores to the Public Works Department.

With regard to the proposal made by the Government of India that purchases made from stock would greatly expedite delivery he stated that he was advised that stocks held for export were often of inferior quality to the goods shipped by the Store Department.

He enclosed a note by the Director General of Stores on the subject of inspection from which it could be seen that in many cases inspection was already extremely limited. In spite, however, of everything being done to expedite supply, manufacturing delays would still occur which could not be prevented by any foresight, and he pressed the importance of issuing such orders to indenting officers as would ensure ample time being allowed for the provision of stores wherever practicable. In conclusion he approved of the proposal to extend, within reasonable limits, the power of all officers of the Public Works Department to purchase English stores locally and thus diminish the number of indents now sent home for supplies of small value. He was not, however, prepared to sanction any relaxation of the rule that prohibited the purchase of stores by means of orders given to agents or firms in India who had to send them to England for execution.

Public Works  
Department  
Standing  
Order No. 85  
of 1904.

32. The Government of India then issued Public Works Department Standing Order No. 85, dated 12th July 1904, (Public Works Department Code, Volume II, 6th edition) laying down the following rules for the supply of stores for the public service :—

*Paragraph 1.*—All articles which are not manufactured in India must be obtained by indent on the Store Department of the India Office except :—

- (a) When for any special reason it may be more economical to purchase them in India.
- (b) When serious inconvenience to the Public Service would be caused by waiting to obtain them from England.
- (c) When the articles are perishable.
- (d) Explosives which should always be purchased locally.
- (e) Such other classes of articles as may be specially exempted by the Government of India from time to time.

Corrugated iron should always be obtained through the India Office.

*Paragraph 2.*—Purchases of the following articles are absolutely prohibited.

- (i) Articles of foreign manufacture, which are not already in India at the time of order, from local agents or firms in India.
- (ii) Articles from Europe, or America except through the agency of the India Office.

*Paragraph 3.*—Laid down the financial limits within which officers of the buildings and roads, irrigation and railway branches of the Public Works Department might purchase articles of foreign manufacture when the conditions in paragraph 1 had been fulfilled.

*Paragraph 4.*—Laid down that the reasons for purchase under the exceptions laid down in paragraph 1 must be placed on record.

*Paragraph 5.*—Stated " It is to be distinctly understood that the powers of local purchase of European stores detailed in the above rules are not to be exercised unless the occasion necessitates a departure from the usual method of obtaining them through the India Office, the advantages of which cannot be too strongly insisted on *vis.*—

- (i) Lower price for equal quality.
- (ii) The certainty of obtaining the quality desired.

In all cases, therefore, requirements should be foreseen and indents sent forward in ample time for the articles to be obtained from England whenever practicable."

*Paragraph 6.*—All articles required for the public service which are manufactured in India from materials produced in the country may be purchased locally.

*Paragraph 7.*—Articles manufactured in India from imported materials may be purchased in the local market subject to the following conditions :—

- (a) That the articles shall not have been imported into India in a finished or partly finished state.
- (b) That the price is not in excess of that at which similar articles of equal quality can be obtained by indent on the Secretary of State, the cost of carriage to site being taken into account in each case.
- (c) That in case of articles which do not require special tests the purchases shall only be made from *bona fide* manufacturing firms as may be approved by superintending engineers.
- (d) That important iron and steel work shall only be obtained from firms approved by the local Government and entered in schedule B., as corrected from time to time by the Government of India and shall be subject to specifications laid down by the Government of India and required, if necessary, to pass the tests prescribed in Schedule C.

Rules 6 and 7 are permissive not mandatory in form.

33. The preference to be given to Indian industries was more clearly expressed in the Regulation for the Army, Army Regulations, India, Volume V, paragraph 614 (1901) states :—

Military  
Regulations  
for purchase  
of stores.

"No indent on the Secretary of State should be submitted without previous inquiry whether the articles included in the indent can be obtained of local manufacture. If goods of local manufacture are obtainable they should be preferred to imported articles provided they are practically as good in quality and provided also they are not appreciably dearer."

This rule appears in Army Regulations, India, Volume III, paragraph 13 :—

"No article shall be imported if it can be obtained of local manufacture practically as good in quality and not appreciably dearer". All stores of European and American manufacture must ordinarily be bought by, and can only be imported through, the India Store Department. They can, however, be bought locally by the competent financial authority :

- (a) when serious inconvenience would arise from awaiting their arrival from England,
- (b) when it is more economical to do so,
- (c) when the stores are perishable.

In 1905 another paragraph, 13-A., was added to these rules to conform to Public Works Department Standing Order No. 85 of 1904, which in effect applied to all articles manufactured from imported materials the special restrictions which were originally intended to apply to iron and steel manufactures only. Paragraph 13-A. reads as follows :—

"Articles manufactured from imported materials may be purchased locally provided that :—

- (a) they have not been imported in a finished or semi-finished state,
- (b) their price does not exceed that at which similar articles of equal quality can be obtained by indent on the Secretary of State, the cost of carriage to site being taken into account in each case,
- (c) they must be obtained from approved *bona fide* manufacturing firms,

- (d) important iron and steel work shall only be obtained from firms approved by the Government of India ”.

Memorial by  
Engineering  
and Iron  
Trades  
Association  
in 1905.

34. Such were the rules in force when a memorial was presented to the Government of India by the Engineering and Iron Trades Association on the 12th April 1905 in which it was pointed out that the policy of the Government of India with regard to the local purchase of stores inflicted great hardship on Indian manufacturing and importing engineering firms.

The Association pointed out that these firms had, in past years, maintained large and representative stocks of tools and stores primarily with a view of meeting their individual requirements as general contractors and manufacturers of larger material but also to enable them to execute orders for similar material from the Public Works Department and other branches of the public service. The committee of the Association pointed out that fully representative stocks of this class were costly to maintain, that the policy of abandonment of purchase in the local markets was inevitably resulting in the depletion of useful stocks and they claimed that by removing as far as possible the existing regulations against the local purchase of imported stores Government, while assisting firms to maintain stocks on a commensurate scale, would attain proportionate benefit not only in times of extremity but also from the expansion of established and development of other industries.

Stores  
Committee  
of 1906.

35. In consequence of this memorial the Government of India appointed a committee (known as the Stores Committee) in Resolution No. 1243-1252 (Commerce and Industry) of 19th February 1906. This Committee were instructed to enquire, among other things, into the working of the stores rules the method of comparison of prices as between locally manufactured and foreign articles and the quality of imported articles purchasable in India.

Committee's  
recommendations.

36. The Committee submitted their report in July 1906 and recommended the following rules for the supply of articles for the public service:—

*Rule I.*—All articles produced in the country in the form of raw material or manufactured in India from materials produced in the country should, by preference, be purchased locally provided that the quality is sufficiently good for the purpose and price reasonable.

*Rule II.*—Unless similar articles can be obtained from the India Office, Store Department, at a price less than that of the article procurable in India, all articles manufactured in India from imported materials should, by preference, be purchased in the country subject to the following conditions:—

- (a) that the articles shall not have been imported into India in a finished or practically finished state,
- (b) that articles which need to be tested shall pass the prescribed tests for such articles,
- (c) that in the case of articles which need not be tested the quality in respect of finish shall be sufficiently good for the purpose for which they are intended but in other respects practically equal to that of similar articles imported through the India Office,
- (d) that important iron and steel work shall only be obtained from firms approved by Local Government as entered in a schedule corrected from time to time by the Government of India and shall be subject to current specifications prescribed by the Government of India for such work.

In cases where the selection of the source of supply was dependent on comparative prices the following procedure was to be adopted in making the comparison:—

- (i) where articles are of a recognised standard type simultaneous tenders are to be invited in England and India, the English tender to include insurance and freight.

(ii) where such a course is not practicable, reference should be made to Home prices, freight and insurance charges as shewn in the rate lists,

(iii) where information is not available from rate lists, purchase in India is to be subject to the condition that the price is reasonable,

(iv) the following charges are to be included in order to arrive at the market value at an Indian port of the article imported from England :—

(a) Landing, wharfage, and port charges as shewn in the rate lists.

(b) Customs duty as shewn in the tariff as applicable to the article in question, calculated on its cost *plus* freight, insurance and the incidental charges in (a).

(c) India Office, Store Department, establishment charges at 2 per cent on *f. o. b.* cost *plus* freight,

(v) in cases (i) and (ii) cost of carriage to site from port or place of manufacture as the case may be shall be taken into account,

(vi) in all cases advantages of promptitude of supply must be taken into consideration as a factor affecting prices.

*Rule III.*—Subject to exception in rules 4 and 5, all articles not manufactured in India should be obtained by indent on the Store Department of the India Office.

(a) When necessity for provision can be readily foreseen.

(b) When for any special reason purchase in India is considered inadvisable.

*Rule IV.*—All articles not manufactured in India should be purchased locally ;

(a) When such purchase can be proved to be more economical.

(b) When serious inconvenience to the public service would be caused by delay in supply from home and prompt delivery in India can be obtained.

(c) When necessity for supply cannot readily be foreseen and they can be obtained more promptly in India, quality and price must, however, be taken into consideration.

*Rule V.*—The following articles whether manufactured or produced in India or not, should always be purchased in India provided that the required quality can be obtained :

(a) those of a perishable nature,

(b) explosives,

(c) such other classes of articles the purchase of which in India may be authorised by Government of India from time to time.

In regard to powers of purchase the Committee proposed that officers might purchase articles manufactured in India referred to in rules 1 and 2 and articles irrespective of sources of origin referred to in rule 5 up to the ordinary limits to which they were empowered to enter into contracts. Special limits were, however, suggested for all except local Governments and Director of Railway Construction (who were to have full powers) for purchases made under rule 4 and all officers were to place on record their reasons for purchases made under rule 4 for transactions exceeding Rs. 50. It was also to be understood that every effort was to be made to anticipate requirements so that indents might be sent forward in ample time for the articles to be obtained from England when such a course was practicable.

Government of India recommend the proposals with two exceptions.

37. In their Despatch (No. 33 of 16th May 1907) forwarding the report of the Committee to the Secretary of State the Government of India stated that they considered the rules in force to be defective in that they only permitted certain stores to be bought in India under certain conditions and that no satisfactory system was in force to enable their officers to determine whether those conditions had been fulfilled.

The Government of India agreed generally with the recommendations of the Committee and were prepared to give their full support to the draft rules formulated by them, but considered that the rules should include provision for the purchase of locally made articles irrespective of price, in cases of emergency. In the matter of comparison of prices however the Government of India did not agree with the Committee in their proposal to call for simultaneous tenders in India and England in the case of standardised articles.

They endorsed the Committee's criticisms of the existing rules, which were stated to be inadequate and to have failed in giving any indication of the policy of the Government of India, which had met with the invariable support of the successive Secretaries of State, in favour of the purchase of articles of indigenous origin and local manufacture; they noted that the existing rules were permissive only on this point. Executive officers must depend almost entirely on the precise instructions issued for their practical guidance and that it was no part of their duty to go beyond these instructions to ascertain from other sources the exact intentions of Government and they considered that the draft rules framed by the Committee would remove these defects. The mandatory form in which the first two rules had been cast and the preference therein given to articles of a non-Indian origin would afford to executive officers an unmistakable indication of the wishes of Government to encourage the purchase of local products and manufactures.

The Committee had found a difficulty in interpreting the terms "partly finished" and "*bona fide* manufacturing firm" which appeared in conditions (a) and (c) of rule 7 of Public Works Department Standing Order No. 85 of 1904. The Government of India agreed with the Committee that in certain classes of manufactures the placing together of component parts obtained in a finished state from other sources constituted a clearly defined industry, and that the Indian manufacturer had every right to be placed in this respect on precisely the same footing as the English manufacturer. They considered that a clearer indication in this matter would be secured by the substitution as proposed in the Committee's draft rule 2 (a) of the words "practically finished" for the then present wording "partly finished" and that a satisfactory safeguard against imperilling local manufactures in a finished state would be provided by the proposed establishment of an efficient inspecting staff.

The Government of India, however, considered that the recommendations made by the Committee in respect of supply of locally made articles were defective in two respects.

In the first place the Committee had omitted to make provision for the purchase of locally made articles irrespective of price in cases of emergency. While considering this omission to be a matter of no great importance, the Government of India considered that this provision should be included in the draft rules seeing that a similar relaxation was already in force in respect of imported articles.

The second defect noticed by the Government of India, on which they laid more stress, was that the draft rules contained no means of ensuring that articles procurable in India of Indian manufacture were not included in indents on the Secretary of State. The Government of India were of the opinion that special steps were necessary to render control in this respect more effective, and they decided that indenting officers should be required to explain in their indents the necessity for including in the demand any article which was available of Indian manufacture and they intended to subject indents, after despatch, to a scrutiny in the secretariat similar to that exercised in accordance with the wishes of the Secretary of State in respect of local purchase of imported stores.

As regards comparison of prices the Government of India agreed that an addition on account of customs duty should be made to the price of English stores and that a complete case had been made out by the Committee for the inclusion of a percentage to represent the establishment charges of the Store Department of the India Office. The latter was a special agency constituted for the particular purpose of placing with English manufacturers the orders of the Government of India. It had no counterpart in India and they agreed with the Committee in rejecting the argument that its cost was balanced by the cost of local purchase in India.

They also agreed with the Committee in their suggestion for amplification of rate lists so as to include incidental charges (freight, landing charges &c.); but were unable to support the alternative method of simultaneous tenders; as they considered that the Committee had underestimated the inherent difficulties and they observed that a similar proposal had been negatived by Lord George Hamilton's despatch No. 11 Financial Stores, of 3rd September 1896.

They, therefore, proposed that the same method of comparison should be adopted in the case of standardised articles as had been recommended by the Committee for other articles; they also agreed with the Committee that promptitude of delivery was a factor affecting prices and that executive officers should be instructed to take this point into consideration in comparing the advantages offered by Indian and English sources of supply.

As regards the supply of articles not manufactured in India the investigation of the Committee satisfied the Government of India that a case had been made out, on the ground of economical and expeditious execution of work, for a modification of the system which had in principle remained unaltered since its introduction in 1880. They could not avoid the conclusion at which the Committee had arrived that the advantage of economy, whether actual or final so often claimed for the present procedure could not in point of fact be held to be indubitably proved while the evidence recorded, including as it did the opinion of independent bodies such as port trusts and municipalities, pointed to the general conclusion that articles of good quality could be secured in the Indian market.

The Committee recommended that imported articles should be locally purchased where economy would result and the Government of India agreed that this change was fully justified notwithstanding that the orders conveyed in Secretary of State's Despatches of 26th July 1882 and 23rd February 1889 did not apparently contemplate the local purchase of English stores on the ground of economy alone.

The Committee also recommended that contracts for the entire construction of large buildings and other works including the supply of materials of European manufacture should be entered into with firms of recognised standing. The Government of India laid great stress on this recommendation, a similar proposal having been placed before the Secretary of State in their Despatch No. 14-P. W., of 26th May 1904. Mr. Brodrick was unable to give his assent for reasons stated in his Despatch No. 6-P. W. (Stores) of 30th September 1904, and the Government of India considered the proposal to be one of such importance that they desired to submit it once more for the favourable consideration of the Secretary of State.

The Committee also recommended the establishment of a special staff for the inspection of articles supplied in India. A similar proposal had been made by the Government of India in their Despatch No 338 of 15th October 1896; objections were, however, raised by Sir A. Rendel, and the Assistant to the Director General of Stores on the score that the appointment of such officers would shew that Government had adopted a policy of preference and secondly that in the exercise of their powers such officers would not be subject to adequate supervision and control. The Committee considered these objections as untenable, a finding in which the Government of India concurred.

To sum up the Government of India asked the Secretary of State's sanction to the:—

- (1) introduction of the rules and procedure formulated by the Committee subject to :—
  - (a) omission of simultaneous tenders in the case of standardised articles,
  - (b) inclusion of a rule to permit of purchase of locally manufactured articles in cases of urgency without reference to price ;
- (2) that in cases of execution of important construction works by firms of approved standing the supply of English stores required might be included in the contracts ;
- (3) to the establishment of an inspecting staff to test and pass supplies purchased in India.

**Secretary of State gives no decision.**

38. Mr. Morley in his Despatch No. 21-Financial (Stores), of 18th October 1907, gave no decision on the proposals of the Government of India, but forwarded for their consideration reports by the Director General of Stores and the Consulting Engineer to the India Office, which he commended to the most careful consideration of the Government of India in view of great weight which he attached to the opinions expressed.

The memorandum by the Director General of Stores was a running commentary on the paragraphs of the Committee's report and was largely concerned with matters of detail.

The Consulting Engineer, Sir Alexander Rendel, however, correctly appreciated that the result of changes in the rules would result in transfer of purchases from England to India. He pointed out that in his experience this would result in payment of enhanced prices, that a considerable period would be occupied in educating superior Indian officials in purchase, and in eliminating corruption from among the subordinates. He agreed, however, that whatever system was adopted there would always be defects in detail since detail was more or less at the mercy of the personal element, and that it was quite impossible to balance one circumstance against another with any hope of arriving at a satisfactory result.

**Government of India maintain their proposals.**

39. The Government of India in reply in their Despatch No. 35, of 26th March 1909, observed that unlike the Consulting Engineer who had confined himself to questions of principle arising from the Committee's report, the Director General of Stores had entered into a close examination of the arguments and facts set forth ; they did not propose to follow Mr. Grant Burls in his detailed criticism of the Committee's report nor to discuss specifically the points of secondary importance referred to in his note.

In the matter of *bona fide* manufacturers they dissociated themselves from Mr. Grant Burls' acceptance of the remarks of the Board of the Bombay, Baroda and Central India Railway referred to in paragraph 30 of the report, "that they did not consider the local letting of contracts involving the mere putting together of material obtained in parts from Europe as falling within 'encouragement of local enterprise' and that, until India was capable of manufacturing the necessary material in the country, the Board were not prepared to encourage local purchases of steel railway waggons or other railway specialities." The Government of India in particular took exception of these remarks as a "full and fair interpretation" of the existing regulations.

They stated that they had consistently maintained the attitude described in paragraph 12 (b) of Lord Lansdowne's Despatch No. 65 of 11th March 1889: In discussing the meaning to be attached to the expression "finished or partly finished state" they had reiterated in paragraph 13 of their Despatch No. 33 of 16th May 1907, the views of Lord Lansdowne's Government and they accepted the definition given by the Stores Committee that "in certain classes of manufacture the placing together of component parts obtained in a finished state from other sources constitutes a clearly defined industry." They maintained that it was clear that the attitude of the Board of the Bombay, Baroda and Central India Railway on this subject in no way represented their views and that in particular their attitude in respect

of non-encouragement of local purchase of steel railway requisites was in direct opposition both to the rules and practice of the Government of India.

They observed that Mr. Grant Burls' note and Sir A. Rendel's memorandum included numerous allusions to the "protective" character of the Committee's resolutions. The Government of India considered, however, that in respect of the purchase of articles of local manufacture the position was quite clear and was in no way affected by the questions of policy referred to.

The Government of India could not take into account the probable effect on English manufactures of any action on their part which might tend to develop local industrial efforts. They had repeatedly pledged themselves to encourage the purchase of the products of local industries and to foster local enterprise and their pledges had been endorsed by successive Secretaries of State. Whatever other objections might be taken to the Committee's report, their recommendations were not open to objection merely on the ground that they would have the effect of facilitating, at the expense of imported stores, the purchase by government departments of stores of Indian manufacture.

40. Lord Morley's decision was conveyed in Despatch Financial (Stores) No. 21 of 13th November 1908. He agreed with the Government of India that the existing rules might with advantage be modified so as to give greater encouragement to the purchase in India of articles either produced or manufactured there, but decided that the draft rules required modification in some respects.

Secretary of  
State sends  
revised rules.

*Rule 2, Clause (c).*—The tendency of this rule as drafted appeared to encourage the purchase in India of inferior articles at a price not less than the English price; modification was necessary to make it clear that the intention was to encourage the purchase of such articles in India only in cases where no disadvantage to the State was involved.

*Rule 3* required that two per cent on account of establishment charges of India Office, Store Department, should be added to the cost of imported articles when comparing the prices of such articles purchased in India. If this were done it would be correct to add to the cost of articles purchased in India the cost of Government testing and inspection. It might be presumed that the two percentages would be approximately equal and that the best and simplest course appeared to be to omit both.

*Rules 4 and 5.*—The two rules were not quite consistent with each other. It appeared to the Secretary of State that they seemed to give excessive encouragement to the purchase in India of inferior, or more costly, imported articles on the grounds of difficulties, real or alleged, in the way of foreseeing their necessity; he considered that the rules contained in Standing Order No. 85, Appendix 30, Public Works Department Code 1904, were satisfactory, subject only to an addition for the purpose of authorising the purchase in India of articles of small value.

In view of the difficulty attending comparison of price and quality, the Secretary of State decided that lists of purchases in India not included in the rate lists should be sent to him every financial year in order that he might have an opportunity of noticing any cases in which excessive prices had been paid. The Government of India were directed to make it clear when promulgating the new rules that they were adopted as experimental only, and would be revised if they resulted in deterioration of quality, or an increase of cost of stores supplied to Government.

Sanction was also given, subject to certain conditions, of the supply of stores required for construction by Indian firms of approved standing in the case of important construction works let out on contract.

41. After a further Despatch by the Government of India (No. 101, of 24th December 1908) in respect of certain doubts regarding money limits, Lord Morley forwarded a revised draft with his despatch No. 2 Financial (Stores), of 5th February 1909, which was promulgated by the Government of India, Department

Stores Rules  
of 1908.



of Commerce and Industry, Resolution 4941-4988-102 of 14th July 1909. In this Resolution the Government of India reviewed the situation leading to the appointment of the Committee and gave a short resumé of their recommendations and the orders of the Secretary of State.

The Resolution stated that "The Governor-General in Council is now pleased to direct that the rules appended to this resolution shall be observed in supersession of all existing orders regarding the purchase of stores required for the use of government departments. He desires to impress on all concerned that the policy of Government is to encourage the purchase of articles locally manufactured or produced, and the first two of the rules now drawn up accordingly prescribe that preference shall be given to such articles when the quality is satisfactory and the price not unfavourable."

Substantial modifications were introduced in the rules applicable to the local purchase of European stores. Under rule 3 (a) officers were permitted to purchase, without restriction, English stores of small value which were in India at the time of the order within the money limits prescribed in rule 13 while under rule 5 purchases might similarly be made not only in cases of delay, but also where economy could be effected by the greater promptitude afforded by purchase in India.

The following is a summary of the rules of 1909 :—

*Rule 1.*—Articles produced in India in the form of raw material or manufactured in India from materials produced in India should, by preference, be purchased locally, provided the quality is sufficiently good and the price not unfavourable.

*Rule 2.*—Articles manufactured in India from imported materials should, by preference, be purchased in India subject to the following conditions :—

- (a) That a substantial part of the process of manufacture has been performed in India.
- (b) That the price is as low as that at which articles of similar quality can be obtained through the India Office.
- (c) That the materials are subject to such inspection and test as may be prescribed by the Government of India.

*Rule 3.*—Articles not manufactured in India should be obtained from India Office Store Department except :—

- (a) When articles are in India at time of order and cost does not exceed the limits in rule 13.
- (b) In case of important works let out on contract, articles required for the construction may be supplied by the contracting firm subject to the conditions.
- (i) that the firm is approved by the Government of India and included in a list of firms so approved.
- (ii) that the materials are subject to current specifications, tests prescribed by Government of India.

*Rule 4.*—Gives a list of certain particular articles which may be purchased in India, whether manufactured or produced there or not.

*Rule 5.*—Prescribed that in cases where serious inconvenience to the Public Service would be caused by waiting to obtain articles from England, or where owing to promptitude of supply economy can be effected by purchase in India of articles which, under foregoing rules, should be obtained through the India Office, the purchase may be made in India subject to the money limits prescribed in rule 13, but that in cases of purchases of over Rs. 50 in value the reasons must be placed on record.

*Rule 6.*—States that nothing in these rules shall be deemed to prohibit purchase of European stores by one department or railway from another.

*Rule 7.*—States that all articles which under the foregoing rules are not to be bought in India should be obtained on indent on the Store Department of the India Office except articles which the Secretary of State may have specially authorised the Government of India or its officers to purchase direct outside India; a list of such articles is given.

*Rule 8.*—Requires that every effort should be made to foresee requirements so that there may be ample time to obtain them by indent on the India Office.

*Rule 9.*—Gives the time required from the transmission of an indent upon the Secretary of State to the receipt of the stores.

*Rule 10.*—Prescribes the following method of comparing prices in cases where the source of supply is contingent on price, the procedure is as follows:—

- (i) Reference should be made to Home prices shown in the rate lists; freight is to be added at latest rates *plus* insurance and freight brokerage.
- (ii) In cases of important contracts prices ruling in the English market are to be obtained by telegram from the Director General of Stores.
- (iii) Where necessary information is not available from rate lists, purchase in India is subject to the condition that the price is not unfavourable.
- (iv) Following charges are to be included to arrive at market value, at an Indian Port, of an article imported from England.
  - (a) Landing, wharfage and port charges as shown in rate lists.
  - (b) Customs duty as per tariff calculated on cost *plus* additional charges mentioned in the earlier part of this rule.

*Rule 11.*—Lays down that any articles purchased in India which should be tested are liable to specifications approved by the Secretary of State in Council and shall be required to pass the tests prescribed.

*Rule 12.*—Lays down that important iron and steel work purchased in India shall only be obtained from firms approved by local governments and entered into a schedule corrected from time to time by the Government of India—a list of approved firms (27 in the whole of India and Burma) is given.

*Rule 13.*—Prescribes the financial limits on the powers of officers to make purchases in India.

In the case of purchases under rules 1, 2 and 4 an officer's powers of purchase extend to the limits to which he is empowered to enter into contracts.

In the case of purchases under Rules 3 (a) and 5 (*i.e.*, articles not made in India) the powers of purchase are very carefully restricted. The highest powers are those accorded to local governments and officers exercising those powers; these powers are for any one article, or any number of similar articles purchased at one time, Rs. 3,000 in case of purchases made under Rule 3 (a) and full powers under rule 5.

42. In Despatch No. 3-Financial (Stores), of 29th March 1912, the Secretary of State sanctioned the addition of interest charges to the cost of English stores for the purpose of comparing prices and a slight increase in the insurance rate. He was, however, unable to agree to the proposals submitted by the Government of India in Department of Commerce and Industry letter No. 47 of 21st September 1911, *viz.*, that the limit of Rs. 50 should be abolished in rule 5, or that the rule should be altered so as not to require the purchasing officer to record the reasons for purchase except when the limits applicable to purchases under rule 3 (a) were exceeded.

Stores rules  
of 1912.

The Secretary of State considered it desirable to maintain a strict control over the special kind of purchase with which rule 5 dealt, but with a view to relieving officers of the necessity for recording very small purchases he substituted a limit of Rs. 750 for the existing limit of Rs. 50. He also introduced a further alteration for the purpose of making it quite clear that

purchases under rule 5 were allowed only when the articles were in India at the time of purchase. He thought it desirable to take this opportunity of emphasising the distinction between the scope of rules 3 and 5, respectively.

The object of rule 3 (a) was not to sanction local purchase of imported stores irrespective of price and quality merely because they happened to be in India at the time. The intention was that due regard should ordinarily be paid to the price and quality of similar stores obtained through the India Office.

The intention of rule 5, on the other hand, was that in circumstances of urgency, or where economy would result from immediate purchase, imported stores already in India might be purchased, if necessary, at higher prices than those paid by the India Office or when the quality, though adequate for the purpose, was inferior to that which would have been supplied through the India Office.

Rule 3 (a) was therefore amended by him and revised rules were enclosed which were to supersede those sent with Lord Merley's Despatch No. 2-Financial (Stores), dated 5th February 1909. The rules were accordingly issued under Government of India Resolution, No. 6847-6897-32, Department of Commerce and Industry, dated 12th September 1912.

Subsequently, in response to a request from the Government of India, the Secretary of State in Despatch No. 1-Financial (Stores), of 25th April 1913, sanctioned a proposal to modify rule 4 (f), so as to include among the list of articles which might be purchased in India electrical power and lighting plants of not more than 25 kilowatt capacity, even though they involved the provision of generators and cables for distribution; the rules at present in force were issued by the Government of India under Resolution No. 5829-5876-11, Department of Commerce and Industry, dated 24th July 1913.

Comparison  
of stores  
rules with  
proposals  
made by Gov-  
ernment.

43. Since the Stores Rules of 1913, though subject to temporary modifications due to the war, are still in force it will be convenient to contrast them with the proposals submitted to the Secretary of State in 1907.

In the first place, the words of the preamble "with a view to giving full effect to the policy of the Government of India with regard to the encouragement of local industries the following rules are to be observed" were omitted. Executive officers were thus deprived of this ever present reminder of the intentions of Government.

Secondly, in respect of articles produced in India of raw material or manufactured in India from materials produced in the country the words "not unfavourable" were substituted for "reasonable."

Thirdly, in respect of articles not manufactured in India, the Secretary of State prescribed that articles so purchased must always be in India at the time of the order; no such recommendation was, however, made by the Government of India, who had in view (a) economy (b) saving of time (c) convenience of the public service.

Fourthly, in comparison of prices the proposal that two per cent. on account of establishment charges for the India Store Department should be added to English prices was negatived by the Secretary of State, and the recommendation that in all cases the advantage of promptitude of supply must be taken into consideration, as a factor affecting prices, was not embodied in the rules.

Fifthly, the rule that in cases of emergency articles of Indian origin, or manufacture, should, be purchased irrespective of price was omitted by the Secretary of State.

Sixthly, the Government of India recommended that articles not manufactured in India should, subject to the exceptions in rules 5 and 7, be obtained from the India Office:—

(a) when necessity could be readily foreseen,

(b) when for any special reason the purchase in India was not considered advisable.

As amended by the Secretary of State, articles not manufactured in India should be obtained by indent on the Store Department of the India Office except when the article is in India at

the time of purchase, and the cost of supply does not exceed Rs. 3,000, unless the urgency clause can be invoked. Moreover the Secretary of State required that such stores should normally be obtained through the India Office and consistent failure to do so would incur a threat of reduction of powers of sanction.

44. In despatch No. 50, of 28th August 1918, the Government of India asked the Secretary of State whether the existing restrictions on the purchase in India of imported stores might not be waived so far as to allow the purchase of such stores through branches established in India of English firms recognised by the Director General of Stores as competent manufacturing firms. They were confident that if purchases through branch firms in India were permitted, the measure would fully justify itself not merely in the greater expedition with which stores of great quality would be made available to local officers, but also in the certainty that expert assistance would be at once available should repairs or the prompt supply of spare parts be necessary.

Local purchase of plant and machinery.

Their proposals were based to a large extent on certain recommendations of the Stores Committee of 1906, modified in the light of subsequent experience. They were aware that these proposals had been examined and rejected by the Secretary of State, but they ventured to state their proposals again in view of subsequent developments in India and the constant pressure to which they were subjected by commercial circles. The general grounds on which the recommendations were made were given in the Committee's report and the proposal had received the support of Lord Minto's Government in their Despatch No. 33 of 1907; on this point, however, they were over-ruled in Secretary of State's Despatch No. 21-Financial (Stores), dated 13th November 1908, for the reason that the proposal seemed "to give excessive encouragement to the purchase in India of inferior or more costly imported articles on the ground of difficulties, real, or alleged, in the way of foreseeing their necessity".

This was the decision they ventured to ask Lord Crewe to reconsider. They believed that sufficient emphasis had not been laid on the condition to which the Committee had referred in their report, that such purchases should be permitted, not from agents or middlemen, but only from Indian branches of the best English firms. This was a condition of primary importance and one on which they desired to lay considerable stress; it was obvious that all possible steps should be taken to discourage the purchase of imported stores, the price of which included middlemen's profit.

The first and most important objections raised by Lord Morley were those based on economy. The Government of India, however, contended that firms maintaining branches in India would not have to enhance their prices, that the increased profits from additional orders would go far towards maintaining the branch, and that it was a well known axiom that manufacturing firms were content to incur losses on branches which were expected in the long run to bring in considerable increase of clientele. That subsequent experience had confirmed the truth of the assertion made in 1907 that local authorities, such as port trusts, who were not subject in the ordinary course to the stores rules effected considerable purchases of plant and machinery through Indian branches of English firms at prices which compared favourably with those at which similar articles were available to Government under the existing system.

The introduction of the system of rate lists indicated in Secretary of State's Despatch No. 1 Financial, dated 12th February 1912, would furnish indenting officers with full and up-to-date information of the prices at which their requirements could be met by the Director General of Stores, and enable them to check prices and protect themselves against attempts to quote high prices. Moreover they proposed that purchases were only to be effected from Indian Branches in cases where after comparison the Indian price was equal to, or less than, the price at which the article could be delivered in India by the Director General of Stores. They did not propose to give local officers complete discretion in the selection of branch firms; they proposed that tenders for plant and machinery should only be invited from the Indian branches of firms with which the Director General of Stores had himself had

dealings and which I am certified from experience to be capable of turning out satisfactory materials.

They were convinced that the system they now recommended would result in greater expedition in the supply of Government Stores. The existing system had worked well within the limitations to which it was subject, and though they were convinced that the Director General had reduced to a minimum the delays which must necessarily occur, at the same time it was evident that delays did occur. In addition to arguments based on efficiency, economy and expedition they desired to point out that although the existing system went a certain way towards encouraging the purchase of indigenous manufactures, it did not tend towards the establishment in this country of reliable firms whose manufactures would be generally satisfactory.

In conclusion they submitted for the Secretary of State's approval the following draft rule 3 (c) :—

"Plant and machinery may be purchased from branches established in India of manufacturing firms of repute which are borne on the list of the Stores Department of the India Office subject to the following conditions :—

- (i) that the branch firm maintains a staff of expert mechanics, capable of erecting and maintaining the plant and machinery required ; is approved by the Government of India ; and is included in the list of firms so approved.
- (ii) that the actual price of the goods (exclusive of any expenditure representing cost of erection by the firm) is as low as that at which articles of the same make can be obtained through the India Office.
- (iii) that the cost of the supply does not exceed the limits prescribed in Rule 13 for purchases made under Rule 5.

Proposals ~~not~~  
accepted in  
principle.

45. Lord Crewe replied in Despatch No. 3 Financial (Stores), of 10th April 1914, that this proposal had been discussed by Mr. (now Sir Lionel) Abrahams, Assistant Under Secretary of State for India, at Delhi in January with representatives of the Government of India and that the opinions arrived at were set out in a memorandum by Sir Lionel Abrahams which he enclosed. He stated that he accepted generally the suggestions contained in the memorandum and requested the Government of India to submit for his approval detailed proposals in accordance therewith.

The opinion of those present at the meeting and the suggestions arrived at were as follows :—

The ordinary practice by which stores not manufactured in India are bought through the Stores Department of the India Office is sound as providing, by means of competition, the best safeguard against excessive price, and by means of inspection, during manufacture when necessary, the best safeguard against unsatisfactory quality. There are, however, some cases among those that would be covered by the proposed additional rule in which it would be advantageous to depart from this practice. Such cases arise under the following conditions :—

- (i) When plant or machinery is required of standard pattern manufactured by firms recognised as satisfactory by the Store Department of the India Office.
- (ii) When it is advantageous to the Department or officer concerned to have the call of the services of responsible representatives of the manufacturing firm for assistance, in putting together or repairs.
- (iii) When the value of the plant or machinery is so small that it would be extravagant to bring out representatives from the place of manufacture, and
- (iv) When, as explained below, the purpose for which the plant or machinery is to be used is such that inspection during manufacture can be dispensed with without risk of serious advantage.

In order to make provision for such cases it was desirable that the Government of India should draw up for the approval of the Secretary of State a list of the specified articles which might, subject to a money limit, be bought from Indian branches of manufacturing firms established outside India and approved by the Store Department of the India Office. All articles, the failure of which might lead to loss of life were to be omitted. All articles, where risk of failure might lead to serious interruption of important Public Services were similarly to be excluded. The money limit for any one order was to be Rs. 15,000 to Rs. 20,000 until experience of the working of the proposed new rule showed it could be raised.

46. The Government of India submitted with Despatch No. 6 of 27th April 1917, a draft rule for the approval of the Secretary of State which in their opinion would give full effect to the conditions embodied in the memorandum of Sir Lionel Abrahams. They found, however, that it was not possible to exclude in their entirety articles manufactured in India. As manufacture in India of most of the articles was a contingency that might arise at any time it was undesirable in their opinion to have to amend the list from time to time and they thought it preferable that the possibility of simultaneous manufacture should be admitted at the outset. The draft rule was as follows:—

List of plant and machinery.

Plant and machinery of the descriptions specified in Appendix C and component parts for repairs and renewals of such plant and machinery may be purchased from branches established in India and approved by the Government of India of manufacturing firms borne on the list of the Store Department of the India Office. A list of approved branch firms is given in Appendix D. This rule is subject to the following conditions:—

- (i) That the plant and machinery are of standard pattern as ordinarily manufactured by the above firms.
- (ii) That the branch firm entertains a staff of expert mechanics capable, when so required, of erecting and repairing plant and machinery which it supplies.
- (iii) That the actual price of the article (exclusive of any expenditure representing cost of erection by the firm) is as low as that at which articles of the same make can be obtained through the India Office.
- (iv) That the cost of supply under any one order or detailed estimate in respect of any one type of standard plant or machinery does not exceed Rs. 20,000.
- (v) That the purchase of plant and machinery which by its failure might lead to loss of life or serious interruption of an important public service is prohibited.

47. Mr. Montagu in reply, Despatch Stores No. 5 of 20th September 1918, pointed out that the effect of the sanction asked for would enable the Government of India to obtain, through a limited number of manufacturers, the bulk of their requirements in engineering plant and machinery amounting to about half a million sterling in value per annum subject to the limitations in the draft rule. He had submitted the proposals to the criticism of the officers of the Store Department and of his Consulting Engineers and it would be seen from a perusal of the summary of their reports which he enclosed that they were unanimous in considering that the proposed change in the method of ordering plant and machinery was open to very serious objection.

Proposals returned for further consideration.

The chief points in the report by the Director General of Stores were:—

- (a) That the proposal would, unless adopted to a very limited degree and with suitable precautions, inevitably lead to a great waste of money.
- (b) That the suggestions made in Sir Lionel Abrahams memorandum were submitted to the Government of India in the hope that the scheme evolved would be so limited in scope as to render objections unimportant.

- (c) That appendix C comprised practically all conceivable engineering supplies.
- (d) That appendix D contained the names of 27 firms only, some of whom had no branches but only agents in India and others were mere factors and not actual manufacturers of the articles concerned. Moreover for important supplies such as cranes, engines, lathes, sluice gates, etc., hardly any of the best makers were included.

The Consulting Engineers' remarks were :—

- (a) That the list of firms was inadequate since many of the firms were not makers of the articles which it was proposed to obtain from them.
- (b) Condition 2 did not seem to be of great importance as the technical staff of a railway at any rate should be just as capable of erecting plant and machinery as the mechanics of a branch firm.
- (c) Under the proposed system there could be none but the most perfunctory inspection of the articles supplied. In boilers, for example, the only inspection which could be made after arrival in India would be an entirely superficial one.
- (d) On the whole they did not consider that the proposals in their present form at any rate would be workable or advisable.

The Secretary of State could not see his way to disregard entirely the conclusions at which these officers had arrived though he realised that many of their objections were those which had influenced his predecessors in the past but to which the Government of India had consistently taken objection. He was anxious to approve of the proposed rule to the utmost degree consistent with the public interest.

Departmental criticism shewed that the list of approved firms was necessarily very limited and that there were many articles of plant and machinery shown in appendix C which they did not manufacture. He would, therefore, lay down as a condition to be embodied in the rule that only such articles as were actually manufactured by the home firms through whose Indian branches they were ordered should be covered by the proposed rule. The second limitation on the proposals which occurred to him as very necessary for reasons given in the departmental criticism, was that no article should be ordered from branch firms in India which required test during manufacture. These criticisms seemed to him to be weighty and he was not disposed to disregard them ; but it would always be open to the Government of India to make further suggestions on this point and in this connection he would suggest for consideration the practicability of such tests being conducted by officers of the Store Department.

The question of the price of the article ordered was of the utmost importance and he would emphasize the necessity of exercising the greatest care to see that the plant and machinery covered by these proposals were only ordered by officers who were both familiar with machinery and capable of comparing local with home prices. He considered the limit of Rs 20,000 for single orders was high.

Subject to the above remarks he was disposed to approve the proposals, but, as owing to war conditions it was unlikely that there would be much scope for the operation of the new rule for some years, he would ask the Government of India to give further consideration to the matter and submit a further rule embodying the conditions he had ventured to suggest as desirable. In conclusion the Secretary of State considered that the Government of India would doubtless not lose sight of the fact that the proposal to order from Indian branches of British manufacturers stores to be made in England and sent out to India would, if adopted to any considerable extent, in his opinion, have the effect of deterring British firms from setting up manufacturing branches in India, as it seemed more than probable that if, and so long as, British firms could obtain orders through their branches in India and make the articles in this country they would agree that they would gain nothing by setting up manufacture in India.

## APPENDIX C.

## RULES FOR THE SUPPLY OF ARTICLES FOR THE PUBLIC SERVICE (1913).

Subject to the provisions of the General Rules specified below, and to any instructions regarding specific articles which have been, or may be, issued by the Government of India from time to time (e.g., those relating to the supply of stationery), the following are the rules relating to the supply of articles required for the public service. These rules supersede all previous orders which are not explicitly continued.

**RULE 1.—Articles manufactured in India from Indian materials.**

All articles which are produced in India in the form of raw material, or are manufactured in India from materials produced in India, should, by preference, be purchased locally, provided that the quality is sufficiently good for the purpose, and the price not unfavourable.

**RULE 2.—Articles manufactured in India from imported materials.**

All articles manufactured in India from imported materials should, by preference, be purchased in India subject, however, to the following conditions:—

- (a) That a substantial part of the process of manufacture of the articles purchased has been performed in India.
- (b) That the price is as low as that at which articles of similar quality can be obtained through the India Office.
- (c) That the materials employed are subjected to such inspection and tests as may be prescribed by the Government of India.

*Note.*—The term “a substantial part of the process of manufacture” in clause (a) means that a substantial part of the preparation of the finished article must be performed in India, whether from raw materials or from component parts obtained in a finished state from other sources.

**RULE 3.—Articles which are not manufactured in India.**

Articles which are not manufactured in India should be obtained by indent upon the Store Department of the India Office, except in the following cases:—

- (a) When the articles are already in India at the time of order, and their price and quality are not unfavourable as compared with those at which similar articles could be obtained through the India Office, and the cost of the supply does not exceed the limits prescribed at the end of Rule 13.
- (b) In the case of important construction works let out on contract, articles not manufactured in India required for the construction of such works may be supplied by the contracting firm subject to the following conditions:—
  - (i) That the firm is approved by the Government of India and is included in the list of firms so approved—*vide* Schedule B, Appendix 30, P. W. D. Code, Volume III.
  - (ii) That the materials are subject to the current specifications and tests prescribed by the Government of India.

*Note.*—Articles of clothing and equipment of European manufacture required for the Burma Police Department may be procured for the present without the intervention of the India Office.

**RULE 4.—Articles which should be purchased in India.**

The following articles, whether manufactured or produced in India or not, should be purchased in India, provided that they comply with the current specifications, are of the requisite quality, and can be obtained at a not unfavourable price.

- (a) Those of a perishable nature.
- (b) Explosives.
- (c) Block tin.
- (d) Wines and spirits and English bottled beer for the use of Government hospitals in India.
- (e) Kerosine oil.
- (f) Plant and materials for electric installations intended to take current from existing centres; and small electrical power and lighting plants of not more than 25



kilowatt capacity, which involve the provision of generators and cables for distribution, provided they comply with the current specifications and tests prescribed by the Store Department of the India Office.

- (g) Australian timber.
- (h) Australian copper.
- (i) Italian marble.
- (j) British Columbian timber.
- (k) Plant and materials for small gas installations the cost of which does not exceed Rs. 15,000.
- (l) Cheap articles of common use required in small quantities only.
- (m) Such other classes of articles as may from time to time be prescribed by the Government of India. All such cases should be reported to the Secretary of State for his information.

**RULE 5.—*Special purchases in India.***

When serious inconvenience to the public service would be caused by waiting to obtain an article from England through the Director-General of Stores or when, owing to the greater promptitude of supply, an economy can be effected by purchasing in India articles which, under the foregoing rules, should be obtained through the Store Department, the purchase may be made in India, subject to Rule 13, provided that the articles are already in India at the time of order; but in such cases, if the value of the articles exceeds Rs. 750, the sanctioning officer should place on record the reasons which make the local purchase desirable. This record shall be available for the inspection of the Examiner of Accounts or the Supervising Officer when required.

**RULE 6.—*Inter-departmental purchases.***

Nothing in the rules is to be deemed to prohibit the purchase of stores of European manufacture by one department or railway from another.

**RULE 7.—*Method of obtaining stores not purchased in India.***

All articles which, under the foregoing rules are not to be bought in India, should be obtained by indent on the Store Department of the India Office, except any which the Secretary of State may have specially authorised the Government of India or its officers to purchase direct outside India. Such purchase is at present permissible in the case of the following articles :—

- (i) Seeds.
- (ii) Cinchona bark.
- (iii) Articles for experimental or research purposes required by officers approved by the Government of India from time to time. A list of the officers thus approved is given in Appendix A.
- (iv) Excise instruments and apparatus required by Provincial Excise Departments for experimental or research purposes.
- (v) China, glass, cutlery, plate, crockery, and perishable fabrics, including linen for residences which are furnished by Government.
- (vi) Australian timber.
- (vii) British Columbian timber.
- (viii) Australian lead.
- (ix) Such articles as Superintendents of Vaccine Depots may require for the preparation of vaccine lymph (e.g., lanoline and glycerine).
- (x) Chemicals and scientific instruments which do not require careful inspection and testing or which are of standard description usually quoted by well-known firms, provided that the articles cannot be procured from the Medical Store Depots.
- (xi) Articles required for Viceregal residences in special and urgent cases.

*Note.*—Payments for stores purchased under this rule should be made direct to the suppliers by the purchasing officers.

## GENERAL RULES.

**RULE 8.**—*Forecast of requirements which should under the rules be complied with by indent on the India Office.*

All requirements should be fulfilled locally in accordance with the provisions of the Resolution No. 4941—4988-102, dated the 14th July 1909, provided that quality and price are not unfavourable and provided that such purchase does not violate any of the instructions contained in these rules. In cases, however, in which stores have to be obtained through the India Office, every effort should be made to foresee requirements so that the indents may be despatched in ample time. Persistent failure of any officer to make such efforts should be brought to notice by the Local Government or other authority which may, at its discretion, cancel or reduce the power of sanction entrusted to the officer at fault.

**RULE 9.**—*Time required to obtain stores from England.*

It may be assumed that the time required from the transmission of an indent upon the Secretary of State to the receipt of the stores is :—

Urgent telegraphic indents, not less than three months.

Ordinary indents, six to ten months, according to the articles demanded.

For special stores, e.g., large girders, rolling stock, etc., up to one year in ordinary times.

*Note.*—When ordinary stock articles conforming to well-recognised standards are required within a shorter period than three months, and the purchase has, under the rules, to be made through the India Office, the indenting officer shall, if he desires that the procedure indicated in the Resolution in the Department of Commerce and Industry No. 6822-6869-37, dated the 13th September 1911, be adopted, state the fact clearly in his telegraphic indent.

**RULE 10.**—*Method of comparing prices.*

In all cases in which the selection of source of supply depends upon comparison of prices, the procedure to be adopted for such a comparison is as follows :—

- (i) A reference should be made to Home prices as shown in the rate lists, and freight should be added at the lowest rates paid by the India Office together with 13s. 4d. per 100l. for interest, 2s. 2d. per 100l. for insurance, and 3d. per ton for freight brokerage.
- (ii) In cases of important contracts, the prices ruling in the English market should be ascertained by telegraphic reference to the Director-General of Stores,
- (iii) In cases where the necessary information as to Home prices is not available from the rate lists, the purchase in India shall be subject to the condition that the price is not unfavourable,
- (iv) In order to arrive at the market value at an Indian port of the article imported from England the following charges shall be included :—
  - (a) Landing, wharfage, and port charges as shown in the rate lists,
  - (b) Customs duty, as shown in the tariff to be applicable to the article in question, to be calculated on its cost plus the additional charges mentioned in the earlier part of this rule.
- (v) The cost of carriage to site from port or place of manufacture, as the case may be, shall be taken into account.

**RULE 11.**—*Tests.*

Any articles purchased in India which should be tested are liable to the specifications laid down from time to time by competent authority, with the approval of the Secretary of State in Council, and should be required to pass the tests prescribed for such articles.

**RULE 12.**—*Firms from which iron and steel may be bought in India.*

Important iron and steel work, if purchased in India, should only be obtained from firms approved by the Local Government or Administration and entered in a Schedule as corrected from time to time by the Government of India. A list of approved firms is given in Appendix B.

*NOTE.*—By "important iron or steel work" are meant articles of iron or steel, which form important components of the project in hand, e.g., bridge girders and roof trusses, built up in the firm's workshops and supplied, ready for erection, in such sections as may be convenient, and rolled steel beams, rails or other sections cut to length or otherwise prepared at the firm's workshops to suit the indenting officer's requirements. The intention of the rule is to ensure that part, the accurate preparation of which is essential to the security of a project, shall be obtained only from firms which possess workshops and appliances capable of turning out work of the desired standard. The raw materials used may be either imported or of Indian manufacture, subject to the usual specifications.

\*This rule is in abeyance for the period of the war.

**Rule 13.\*—Financial limits on powers of officers to make purchases in India.**

In the case of purchases made under Rules 1, 2 and 4, an officer's powers of purchase extend to the ordinary limits to which he is empowered to enter into contracts but in the case of purchases made in India under Rules 3 (a) and 5, the limits for expenditure on any one article on any number of similar articles purchased at one time are as follows :—

*(a) Civil Departments.*

	Rs.
(i) Heads of Departments, Commissioners of Divisions, other officers of or above the rank of Collector whom the Local Government may select, and Principals of Colleges and Inspectors of Schools in Bengal, Bihar and Orissa and Assam.	250.
(ii) Other officers authorised to incur expenditure. ... ..	50
(iii) Controller of Printing, Stationery and Stamps. ... ..	1,000
(iv) Local Government or Administration :—	
1. In case of purchases made under Rule 3 (a). ... ..	3,000
2. In case of purchases made under Rule 5. ... ..	Full powers.

The powers of a Local Government are also exercised by the following officers:—  
Surveyor-General of India.

Agricultural Adviser to the Government of India and Director of the Agricultural Research Institute, Pusa.

Director-General of Observatories.

Director-General, Posts and Telegraphs.

Political Resident, Persian Gulf.

Superintendent of Port Blair.

*(b) Public Works Department.*

	For purchases made under Rule 3 (a). Rs.	For purchases made under Rule 5. Rs.
(i) Executive or Assistant Engineer holding charge of a Division	200	500
(ii) Superintending Engineer or Superintendent of Works ... ..	1,000	2,500
(iii) Local Government or Administration ... ..	3,000	Full powers.

*(c) Railway Department.*

(i) Executive or Assistant Engineer holding charge of a Division on a line under construction or survey ... ..	200	500
(ii) Engineer-in-Chief holding charge of a line under construction or survey ... ..	1,000	2,500
(iii) Agent of an open line ... ..	1,000	2,500
(iv) Railway Board ... ..	3,000	Full powers.

NOTES.—Agents of open lines may delegate to their Engineers-in-Chief, Executive Engineers, or Assistant Engineers holding charge of a Division, such power of purchase as they deem fit up to the limits specified for lines under construction, and to their Chief Storekeepers up to the limits specified for Executive Engineers.

(d) *Army Department.*

				For purchases made under Rule 3 (a).	For purchases made under Rule 5.
				₹	₹
(i)	Director-General of Military Works...	...	...	3,000	Full powers.
(ii)	Divisional Commander ...	...	...	3,000	5,000
(iii)	Officer Commanding an independent brigade; Director-General of Ordnance*; Director, Royal Indian Marine; Director-General, Indian Medical Service (for medical store depots); Director, Army Clothing; and Director-General, Army Remount Department ...			2,500	2,500
(iv)	Officer Commanding a brigade other than those included in (iii); Director of Ordnance Factories; Director of Ordnance Inspection and Director of Ordnance Stores			1,000	1,000
(v)	Superintendent, Army Clothing Factory; Supply and Transport Officer on special duty in Kashmir; and Deputy Director, Royal Indian Marine ...			500	500
(vi)	Chief of the General Staff; General Officer Commanding, Northern and Southern Armies; Adjutant-General in India; Quartermaster-General in India; Director, Medical Services, Army Headquarters, India; Military Secretary to His Excellency the Commander-in-Chief, Military Accountant-General; Controllers of Military Accounts; and Controller of Military Supply Accounts ...			250	250
(vii)	Officer Commanding a station; Superintendent, Army Remount Department; Superintendent Ordnance Factory; Government Inspector of Army Boots Factory, Cawnpore; Assistant Directors of Ordnance Stores; Inspectors (Ordnance Department), the Assistant Inspector in charge of General Stores and the Proof and Experimental Officer, Balasore; Medical Store-keeper; Commandant, Indian Staff College; Assistant Director of Supplies; Assistant Director of Transport, and Assistant Director of Grass Farms ...			200	200
(viii)	Officer Commanding a unit (including a hospital); Senior Medical Officer, Indian Medical Service, of a Station; Recruiting Officer for Gurkhas at Gorakhpur; Officers (Ordnance or Departmental) in charge of depots; Assistant Inspectors (Ordnance Department)-with the exception of the Assistant Inspector in charge of General Stores; Officer-in-charge of Supply Reserve Depots; Commissioned Officers Commanding Depot Transport Lines, Officer in charge of Supplies and Chief Chemical Examiner ...			20	20

\* The Director-General of Ordnance has full powers of local purchase under Rule 5 in cases where the purchases are required to meet urgent field service requirements or to replace issue from mobilization reserves for the equipment of troops suddenly ordered on field service.

(e) *Indian Munitions Board.*

(i)	Metallurgical Inspector, Indian Munitions Board, Jamshedpur	...	...	...	500	500
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NOTE 1.—The financial limits imposed under this rule in respect of purchases made under rules 3 (a) and 5 do not apply to the purchase of articles required on mobilisation or during the continuance of military operations.

NOTE 2.—These powers are subject to the rules of the budget system. No sanction may be given which will involve expenditure from the budget grant of any future year. The powers extending to each sanction, whether against Army, Military Works, or Marine funds.

In the case of the Ordnance, Medical Store and Remount Departments, the Divisional Brigades and Station Commanders are not competent financial authorities.

**RULE 14.**—*Power to sanction departures from the rules.*

The Government of India have power to sanction departures from the rules in cases in which such departure is absolutely unavoidable, [subject to a report to the Secretary of State if the expenditure exceeds Rs. 10,000.]

## LOCAL PURCHASE RULES.

### APPENDIX A.

List of officers referred to in rule 7 (iii), who are authorised to obtain direct from manufacturers or dealers in England, America, Japan, or other foreign countries such articles as they may require for experimental or research purposes.

Superintendent, X-ray Institute.

Chemical Examiners.

Superintendents of Vaccine Depots.

Principals of Medical Colleges.

Superintendents of Medical Schools.

Directors of Bacteriological, Pathological or Research Laboratories, including officers in charge of Divisional and Brigade Laboratories.

Principals of Arts Colleges.

Principals of Technical and Industrial Institutes.

Directors of Industries.

Directors of Fisheries.

Sanitary Commissioners.

Director, Madras Cinchona Department.

Principals of Training Colleges.

Principals of Veterinary Colleges.

Officer-in-charge of the experimental Sewage Installation at Poona.

Surveyor-General of India.

Inspector-General of Forests.

Director-General of Observatories.

Director of Botanical Survey.

Agricultural Adviser to the Government of India and Director, Agricultural Research Institute, Pusa.

Imperial Bacteriologist, Civil Veterinary Department.

Imperial Agricultural Chemist.

Imperial Mycologist.

Imperial Entomologist.

Directors of Agriculture.

President of the Imperial Forest Research Institute.

Principal of the Imperial Forest College.

Director, Geological Survey of India.

Railway Board.

Directors of Public Instruction.

Chief Malaria Medical Officer, Punjab.

Chief Conservator of Forests, Burma.

Director of the Zoological Survey of India.

Inspector of Science and European Schools, Central Provinces.

Metallurgical Inspector, Indian Munitions Board.

### APPENDIX B.

List of Firms referred to in Rule 12. (Not printed).

## APPENDIX D.

## FIGURES RELATING TO EXPENDITURE.

1. We have prepared the following tables to illustrate our report; they show the total expenditure on stores, its incidence between Government of India, Local Governments, Railways, the distribution between India and England and the relative expenditure on certain selected commodities or groups of commodities. All figures relating to India represent average annual expenditure in thousands of rupees for two periods—prewar—1910-11 to 1913-14 and war—1914-15 to 1918-19.

2. It must be clearly understood that the data from which these tables have been compiled have been gathered from reports and returns published by various authorities and at different times. The underlying factors are not the same in all cases and to have insisted on absolute accuracy from such a multitude of officers would have involved an amount of labour incommensurate with the result.

3. The tables, therefore, must be considered as illustrative and relative rather than as affording figures of absolute expenditure; nevertheless they present a convenient view of the situation in respect of the purchase of stores in India, as between imported stores, and stores produced and manufactured in India, and also in England.

4. The question of accuracy does not arise in respect of expenditure by the Store Department of the India Office since the figures have been taken from the Home Accounts of the Government of India, neither does it enter into the table of distribution between the Department, Consulting Engineers, &c., which has been taken from departmental records. Nor can we question the accuracy of the table comparing total imports into India with imports on government account which have been taken from the Statistical Abstract relating to British India and the Accounts of Sea-borne Trade and Navigation.

5. Tables I and II have been compiled from a return specially prepared for the Committee under instructions from the Indian Munitions Board and we wish to record our appreciation of the work of the officers and staffs of the various government departments and railway companies who have furnished us with such valuable information.

The return is intended to show the entire purchase of each province, railway and department for each year. It includes, therefore, as far as the information is available, those purchases excluded from the abstract return of the expenditure on stores purchased in India submitted annually to the Secretary of State, *i.e.*—

- (a) purchases under Rule 6 of the Rules for the supply of articles for the public service, *i.e.*, purchases of stores of European manufacture by one department or railway from another,
- (b) purchases invariably made in India such as bricks, lime and mortar, Indian timber, &c.,

but purchases made by contractors for government works and purchases of food and fodder are excluded.

The classification adopted follows that in the Catalogue of Indian Manufactures and in the Nomenclature and Classification of State Railway Stores. The information relating to stores obtained from government factories is exclusive, in each case, of factories or workshops under control of the department to which the returns relate.

The following classification is adopted :—

- A. Bridgework.
- B. Engineers Plant.
- C. Workshop Machinery and Heavy Tools.
- D. Ballast and Permanent way.

- E. Rolling Stock { (a) Locomotives.  
(b) Coaching and Goods Stock.  
F. Building, Station and Fencing Materials.  
G. Tools and Stores.

1. Hardware, Metals and Implements.
2. Timber.
3. Hides and Leather.
4. Oils and Paints.
5. Textiles.
6. Chemicals
7. Stationery.
8. Coal.
9. Cement.
10. Miscellaneous.

H. Electrical Plant and materials.

6. The following short account of the tables will serve to explain their origin, and purpose and use :—

Table I shows the expenditure under three main headings, (a) imported stores locally purchased; (b) produce of India, indigenous or manufactured; (c) stores obtained through the India Office, or through the Home Boards of company-worked railways; for (i) departments under the Government of India; (ii) local Governments; (iii) railways, both State and company-worked; (iv) Army Department. This table presents a comparative statement of the expenditure of the various branches of the Indian administration and is probably the most accurate statement of actual expenditure obtainable notwithstanding that records have in some cases been destroyed.

Table II shows the same information cast in the form of percentages for representative services or groups of services; it shows at a glance the incidence of expenditure in England and in India.

Table III shows the relative expenditure on selected commodities or groups of commodities by representative branches of the administration; it has been compiled from the same source as Tables I and II.

Table IV shows the amount spent annually in India on selected imported stores. It has been abstracted from the reports sent each year by the Government of India to the Secretary of State.

Table V shows similar information in respect of stores produced in India and is from the same source.

Table VI shows the yearly expenditure on stores by the Store Department of the India Office for various branches of the Indian administration, together with the cost of freight. It has been compiled from the Home Accounts of the Government of India.

Table VII compares the total imports into India of selected commodities with the amounts imported on government account. It has been compiled partly from the Statistical Abstract Relating to British India and partly from the Accounts of Sea-borne Trade and Navigation of British India.

Table VIII shows the distribution of work at the India Office between that undertaken wholly in respect of both purchase and inspection by the staff of the India Store Department; that purchased on the advice of, but inspected by, the Consulting Engineers and Naval Architect to the India Office; and that supplied by the War Office and Admiralty. This information was specially compiled for us by the Director General of Stores at the India Office.

Table IX shows the expenditure on account of salaries, wages, travelling expenses of the Store Department of the India Office as given in the Home Accounts of the Government of India. In order, however, to arrive at an idea of the total annual cost, it is

necessary to add the following amounts as furnished by the Director General of Stores:—

	£
Contingencies ... ..	11,500
Pensions ... ..	8,500
Consulting Engineers' expenses and fees ... ..	11,700
Freight Commission ... ..	4,500
Stationery ... ..	1,200
Rent of India Store Depot ... ..	6,000
Proportionate rent of India Office ... ..	1,200
Total ... ..	47,600

Table X shows the cash expenditure incurred in India by the Indian Munitions Board. Although the figures include large expenditure on behalf of His Majesty's Government, it is of interest as showing the volume of work the new Indian Stores Department may be called upon to undertake in time of war.

7. Although these tables do not in every case relate specifically to the report, we think they will form a useful reference for those readers who may wish to investigate the subject in detail.



TABLE I.

*Average annual value, in thousands of rupees, of stores purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Stores purchased outside India.	Total.
		From government factories.	From private dealers.			
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<b>Government of India—</b>						
1. Mints ...	25	15	1,50	1,22	...	3,12
2. Printing, Stationery and Stamps ...	1,67	3	80,72	7,65	...	40,07
3. Posts and Telegraphs ...	2,76	40	3,31	18,98	...	25,45
4. Survey of India ...	15	1	62	1,62	...	2,40
5. Secretariat Departments, including subordinate offices.	1,31	16	1,71	28	17	3,63
Total ...	6,14	75	37,86	29,75	17	74,67
<b>Local Governments, and Administrations—</b>						
1. Bombay ...	5,63	79	9,02	5,20	70	22,29
2. Madras ...	3,13	2,80	10,13	9,67	13	25,36
3. Bengal ...	4,72	45	5,71	2,16	11	13,15
4. Bihar and Orissa ...	5,26	31	3,00	21	24	9,02
5. Punjab ...	4,10	71	11,32	4,21	79	21,16
6. United Provinces ...	4,83	55	6,64	1,22	29	13,53
7. Burma ...	3,78	68	5,68	3,30	1,70	15,12
8. Assam ...	2,77	62	2,09	36	16	5,91
9. Central Provinces ...	3,48	61	3,84	56	15	8,94
10. Delhi ...	8,29	25	2,53	1,79	18	18,06
11. Coorg ...	18	1	4	...	...	23
12. Peshawar ...	2,87	34	1,11	45	...	4,77
13. Rajputana ...	60	7	22	37	...	1,26
14. Baluchistan ...	86	...	10	...	...	46
Total ...	50,05	770	62,22	29,83	4,46	1,54,26
<b>State-Worked Railways—</b>						
1. North Western ...	17,37	59	1,43,28	2,18,79	...	3,50,03
2. Oudh and Rohilkhand ...	44	13	14,36	49,21	...	64,14
3. Eastern Bengal ...	1,87	...	4,19	84,01	...	90,07
Total ...	19,68	72	1,61,83	3,52,01	...	5,34,24
<b>Company-Worked Railways—</b>						
1. East Indian ...	20,89	53,66	60,77	1,23,01	...	2,66,33
2. Bengal Nagpur ...	...	...	...	...	...	...
3. Great Indian Peninsula ...	...	...	...	...	...	...
4. Bombay, Baroda and Central India.	...	...	Information not available.	...	...	...
5. Madras and Southern Mahratta ...	...	...	...	...	...	...
6. South Indian ...	6,17	...	32,94	55,11	...	94,22
7. Assam Bengal ...	...	...	...	...	...	...
8. Bengal and North-Western ...	...	...	Information not available.	...	...	...
9. Rohilkund and Kumaon ...	...	...	...	...	...	...
10. Burma ...	...	...	...	...	...	...
Total ...	35,06	53,66	93,71	1,78,12	...	3,60,55
<b>Army Department—</b>						
1. Royal Indian Marine ...	92	26	7,39	5,79	...	14,36
2. Ordnance Department, Factories ...	46	59,53	15,45	32,93	...	1,08,37
3. Ordnance Department, Arsenaals ...	14	...	14,87	6,76	...	21,77
4. Indian Medical Service ...	10	2,01	84	14,55	...	17,50
5. Military Works Services ...	4,94	20	3,54	1,08	...	9,76
6. Army Clothing Factories ...	3	27	11,46	10,07	...	21,83
Total ...	6,59	62,27	53,55	71,18	...	1,93,59
GRAND TOTAL ...	1,17,52	1,25,10	4,09,17	6,60,89	4,63	13,17,31

\* Represents value of stores manufactured in Railway Workshops.

TABLE I—concl'd.

*Average annual value, in thousands of rupees, of stores purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA.—		Stores obtained through Director Gen'l of Stores or Home Board.	Stores purchased outside India.	Total.
		From government factories.	From private dealers.			
<b>Government of India—</b>	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Mints ... ..	85	19	3,41	2,77	85	5,07
2. Printing, Stationery and Stamps ...	3,16	11	51,56	9,60	46	64,89
3. Posts and Telegraphs ... ..	7,66	79	7,59	24,53	...	40,62
4. Survey of India ... ..	1,91	13	82	3,95	...	6,81
5. Secretariat Departments, including subordinate offices.	3,91	34	8,31	50	75	8,81
Total ... ..	17,49	1,56	65,69	41,40	2,06	1,20,20
<b>Local Governments and Administrations—</b>						
1. Bombay ... ..	17,93	1,03	19,61	6,59	1,16	46,32
2. Madras ... ..	7,67	2,90	17,08	8,01	22	35,91
3. Bengal ... ..	11,41	1,25	13,60	1,24	13	27,63
4. Bihar and Ori-sa ... ..	5,72	71	9,30	66	17	16,56
5. Punjab ... ..	7,74	1,37	11,88	1,95	12	23,06
6. United Provinces ... ..	11,92	1,39	9,58	1,55	41	24,85
7. Burma ... ..	16,12	1,29	16,53	5,43	2,22	41,69
8. Assam ... ..	3,53	60	3,62	20	6	7,41
9. Central Provinces ... ..	3,82	74	8,37	88	10	13,91
10. Delhi ... ..	10,98	5	13,09	2,95	5	27,12
11. Coorg ... ..	33	2	16	...	...	51
12. Pe-hawar ... ..	2,76	37	1,19	1	...	4,33
13. Rajputana ... ..	1,23	13	57	21	...	2,14
14. Baluchistan ... ..	35	...	13	1	...	49
Total ... ..	1,01,51	11,85	1,24,16	29,77	4,64	2,71,93
<b>State-Worked Railways—</b>						
1. North Western ... ..	31,37	55	1,94,37	87,87	...	3,04,16
2. Oudh and Rohilkhand ... ..	15,65	10	23,12	11,53	...	50,40
3. Eastern Bengal ... ..	15,90	1,13	44,84	38,92	...	1,00,79
Total ... ..	62,92	1,78	2,52,33	1,38,32	..	4,55,35
<b>Company-Worked Railways—</b>						
1. East Indian ... ..	37,00	68,69	76,93	1,00,01	...	2,82,68
2. Bengal Nagpur ... ..	23,47	...	41,18	25,63	...	95,28
3. Great Indian Peninsula ... ..	46,01	...	1,58,99	35,47	...	2,40,47
4. Bombay, Parda and Central India ...	41,30	...	81,39	21,83	...	1,44,52
5. Madras and Southern Mahratta ...	18,25	...	45,66	19,25	...	83,16
6. South Indian ... ..	8,11	...	42,42	28,30	...	78,93
7. Assam Bengal ... ..	8,34	...	14,86	4,70	1	27,91
8. Bengal and North-Western ... ..	5,01	...	14,18	2,14	...	21,33
9. Rohilkund and Kumaon ... ..	2,03	...	6,62	77	...	9,42
10. Burma ... ..	3,88	...	18,74	13	...	22,75
Total ... ..	1,98,40	68,69	5,01,02	2,38,33	1	10,06,45
<b>Army Department—</b>						
1. Royal Indian Marine ... ..	23,81	1,63	15,40	68,71	...	1,03,95
2. Ordnance Department, Factories ...	2,65	20,79	1,18,95	1,24,40	...	2,65,79
3. " " , Arsenal ... ..	26	...	12,30	21,50	...	44,08
4. Indian Medical Service ... ..	97	21,95	9,36	45,06	...	77,34
5. Military Werks Services ... ..	24,55	94	17,38	1,20	1	44,08
6. Army Clothing Factories ... ..						
Total ... ..	52,24	44,71	1,73,39	2,59,87	1	5,30,22
<b>GRAND TOTAL</b> ... ..	4,32,56	1,28,69	11,17,59	7,07,69	6,72	23,93,15

Information not available.

\*Represents value of stores manufactured in Railway workshops.

TABLE II.

*Average annual value, in thousands of rupees, of stores purchased during the period 1910-11 to 1913-14 comparing expenditure in England and India.*

Names.	Imported stores purchased in India.		Produce of India—				Stores obtained through Director General of Stores or Home Board.		Stores purchased outside India.		Total.
	Value.	Percentage on total.	From government factories.		From private dealers.		Value.	Percentage on total.	Value.	Percentage on total.	
			Value.	Percentage on total.	Value.	Percentage on total.					
1. Government of India Departments ...	Rs. 6,14	8.2	Rs. 75	1.0	Rs. 37,86	50.7	Rs. 29,75	39.9	Rs. 17	0.2	Rs. 74,67
2. Local Governments ...	50,05	32.5	7,70	5.0	62,22	10.3	29,83	19.3	4,46	2.9	1,14,26
3. State-worked Railways ...	19,68	3.7	73	0.1	1,61,83	30.3	3,52,01	65.9	...	...	5,34,24
4. Company-worked Railways ...			Detailed information not available.								
5. Royal Indian Marine ...	92	6.4	26	1.8	7,39	51.5	5,79	40.3	...	...	14,36
6. Ordnance Department, Factories ...	46	0.4	59,53	54.9	15,45	11.3	32,93	30.4	...	...	1,08,37
7. Ordnance Department, Arsenal ...	14	0.6	...	...	14,87	68.3	6,76	31.1	...	...	21,77
8. Indian Medical Service ...	10	0.6	2,01	11.5	84	4.8	14,55	83.1	...	...	17,50
9. Military Works Services ...	4,94	50.6	20	2.0	9,54	36.3	1,08	11.1	..	...	9,76
Total as per Table I ...	1,17,53	8.9	1,25,10	9.6	4,40,17	31.1	6,60,89	50.2	4,63	0.3	13,17,31

TABLE II—*concl.*

*Average annual value, in thousands of rupees, of stores purchased during the period 1914-15 to 1918-19 comparing expenditure in England and India.*

Names.	Imported stores, purchased in India.		Produce of India —				Stores obtained through Director General of Stores or Hono Bead.		Stores, purchased outside India.		Total.
	Value.	Percentage on total.	From government factories.		From private dealers.		Value.	Percentage on total.	Value.	Percentage on total.	
			Value.	Percentage on total.	Value.	Percentage on total.					
1. Government of India Departments ...	Rs. 17,49	13.5	Rs. 1,56	1.3	Rs. 66,69	51.6	Rs. 41,40	32.0	Rs. 2,06	1.6	Rs. 1,29,20
2. Local Governments ...	1,01,51	37.3	11,85	4.4	1,24,16	45.7	29,77	10.9	4,64	1.7	2,71,93
3. State-worked Railways ...	62,92	13.8	1,78	0.4	2,52,33	55.4	1,38,32	30.4	...	...	4,55,35
4. Company-worked Railways ...	1,98,40	19.7	68,69	6.8	5,01,02	49.8	2,38,33	23.7	...	...	10,06,45
5. Royal Indian Marine ...	23,81	21.9	1,03	0.9	15,40	11.1	68,71	63.1	...	...	1,08,95
6. Ordnance Department, Factories ...	2,65	1.0	20,79	7.3	1,18,95	44.8	1,23,40	46.4	...	...	2,65,79
7. Ordnance Department, Arsenals ...	26	0.8	.	...	12,30	36.1	21,50	63.1	...	...	34,06
8. Indian Medical Service ...	97	1.2	21,95	28.4	9,35	12.1	45,06	58.3	...	...	77,34
3. Military Works Services ...	24,55	55.7	94	2.1	17,38	39.5	1,20	2.7	1	...	14,03
Total as per Table I ...	4,32,56	18.1	1,28,59	5.3	11,17,59	46.7	7,07,69	29.6	6,72	0.3	23,93,15

TABLE III.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>STRUCTURAL STEEL WORK.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ...	...	...	...	...	...
3. Government of Bombay ... ..	3	...	...	1	4
4. „ „ Madras ... ..	25	2	...	3	30
5. „ „ Bihar and Orissa ... ..	95	...	2	...	97
6. „ „ the Punjab ... ..	3	...	...	...	3
7. „ „ the United Provinces ... ..	2	...	8	...	10
8. „ „ Burma ... ..	31	...	12	2	45
9. Delhi Administration ... ..	4	...	...	...	4
10. North Western Railway ... ..	7	...	8	9.57	9.72
11. Oudh and Rohilkhand Railway ... ..	...	...	...	...	...
12. Eastern Bengal Railway ... ..	...	...	1	...	1
13. East Indian Railway ... ..	}	Information not available.			
14. Bengal Nagpur Railway ... ..					
15. Great Indian Peninsula Railway ... ..					
16. Bombay, Baroda and Central India Railway...					
17. South Indian Railway ... ..	1	...	...	2.63	2.64
18. Royal Indian Marine ... ..	...	...	...	...	...
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names	Imported stores purchased in India.	Produce of India—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>STRUCTURAL STEEL WORK.</b>					
1. Mints ... ..	...	...	...	..	...
2. Printing, Stationery and Stamps...	...	...	...	...	...
3. Government of Bombay ... ..	22	2	59	...	83
4. " " Madras ... ..	22	...	10	...	32
5. " " Bihar and Orissa ... ..	29	...	9	...	38
6. " " the Punjab ... ..	3	2	...	27	32
7. " " the United Provinces ... ..	17	6	18	9	45
8. " " Burma ... ..	1,68	...	38	...	1,96
9. Delhi Administration ... ..	1	...	...	...	?
10. North Western Railway ... ..	3	...	14	1,09	1,26
11. Oudh and Rohilkhand Railway ... ..	...	...	3	1	4
12. Eastern Bengal Railway ... ..	...	...	33	...	33
13. East Indian Railway ... ..	5	...	4	11	20
14. Bengal Nagpur Railway ... ..	...	...	6	2	8
15. Great Indian Peninsula Railway ... ..	3	..	...	57	60
16. Bombay, Baroda and Central India Railway...	6	...	9	14	29
17. South Indian Railway ... ..	1	...	...	30	31
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>ENGINEER. S' PLANT AND WORKSHOP MACHINERY.</b>					
1. Mints .. .. .	...	...	...	27	27
2. Printing, Stationery and Stamps ..	...	2	...	4	6
3. Government of Bombay .. ..	59	1	3	1,27	1,90
4. „ „ Madras .. ..	32	...	12	90	1,34
5. „ „ Bihar and Orissa .. ..	41	...	9	1	51
6. „ „ the Punjab .. ..	32	...	1	1,41	1,74
7. „ „ the United Provinces ..	49	1	7	21	78
8. „ „ Burma .. ..	27	...	3	26	56
9. Delhi Administration .. ..	68	...	1	99	1,63
10. North Western Railway .. ..	1,31	3	23	5,67	7,29
11. Oudh and Rohilkhand Railway ..	1	...	4	...	5
12. Eastern Bengal Railway .. ..	41	...	75	*	1,16
13. East Indian Railway .. ..	Information not available.				
14. Bengal Nagpur Railway .. ..					
15. Great Indian Peninsula Railway ..					
16. Bombay, Baroda and Central India Railway ..					
17. South Indian Railway .. ..	1	...	...	1,63	1,64
18. Royal Indian Marine .. ..	...	...	...	42	42
19. Ordnance Department, Arsenal ..	...	...	...	3	3

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>ENGINEERS' PLANT AND WORKSHOP MACHINERY.</b>					
1. Mints ... ..	3	1	5	19	28
2. Printing, Stationery and Stamps ... ..	.	1	...	...	1
3. Government of Bombay ... ..	1,00	2	34	98	2,34
4. " " Madras ... ..	53	2	15	44	1,14
5. " " Bihar and Orissa ... ..	28	...	9	10	47
6. " " the Punjab ... ..	66	9	14	68	1,57
7. " " the United Provinces ... ..	1,81	1	9	51	2,42
8. " " Burma ... ..	61	1	17	6	85
9. Delhi Administration ... ..	59	...	2	1,29	1,90
10. North Western Railway ... ..	89	2	10	1,67	2,65
11. Oudh and Rohilkhand Railway ... ..	5	...	3	8	16
12. Eastern Bengal Railway ... ..	60	...	11	91	1,63
13. East Indian Railway ... ..	1,30	...	1	1,40	2,71
14. Bengal Nagpur Railway ... ..	50	...	1	52	1,03
15. Great Indian Peninsula Railway ... ..	1,16	...	20	1,96	3,32
16. Bombay, Baroda and Central India Railway ..	54	...	4	21	79
17. South Indian Railway ... ..	9	...	...	28	37
18. Royal Indian Marine ... ..	...	Information not available.			...
19. Ordnance Department, Arsenal ... ..	...	...	...	9	9



TABLE III—contd.

Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1915-14.

Names.	Imported stores purchased in India	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>COACHING AND GOODS STOCK.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...
3. Government of Bombay ... ..	...	4	8	...	12
4. „ „ Madras ... ..	...	3	2	...	5
5. „ „ Bihar and Orissa ... ..	...	34	1	...	35
6. „ „ the Punjab ... ..	...	26	6	13	45
7. „ „ the United Provinces ... ..	...	22	...	...	22
8. „ „ Burma ... ..	...	...	3	...	3
9. Delhi Administration ... ..	...	39	10	22	71
10. North Western Railway ... ..	...	20	600	71,31	77,60
11. Oudh and Rohilkhand Railway ... ..	...	...	2	...	2
12. Eastern Bengal Railway ... ..	...	...	1,20	...	1,20
13. East Indian Railway ... ..	...	Information not available.			
14. Bengal Nagpur Railway ... ..	...				
15. Great Indian Peninsula Railway ... ..	...				
16. Bombay, Baroda and Central Railway ... ..	...				
17. South Indian Railway ... ..	...	...	...	7,42	7,42
18. Royal Indian Marine ... ..	...	...	...	...	...
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

\* Information not available.

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>COACHING AND GOODS STOCK.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ...	...	...	...	...	...
3. Government of Bombay ... ..	...	13	1	7	26
4. „ „ Madras ... ..	...	19	1	3	24
5. „ „ Bihar and Orissa ... ..	...	15	...	6	51
6. „ „ the Panjab ... ..	...	9	...	5	17
7. „ „ the United Provinces ... ..	...	27	...	1	28
8. „ „ Burma ... ..	...	1	...	...	1
9. Delhi Administration ... ..	...	26	...	1	46
10. North Western Railway ... ..	...	8	10	17,47	43,58
11. Oudh and Rohilkhand Railway ... ..	...	52	...	18	3,20
12. Eastern Bengal Railway ... ..	...	1	...	2,44	11,75
13. East Indian Railway ... ..	...	4,70	...	...	21,73
14. Bengal Nagpur Railway ... ..	...	2,72	...	98	11,82
15. Great Indian Peninsula Railway ... ..	...	1,34	...	89	10,81
16. Bombay, Baroda and Central India Railway ... ..	...	3,68	...	2,56	9,03
17. South Indian Railway ... ..	...	22	...	...	1,70
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>HARDWARE, METALS AND IMPLEMENTS.</b>					
1. Mints ... ..	5	...	10	41	56
2. Printing, Stationery and Stamps ... ..	1	...	...	24	25
3. Government of Bombay ... ..	95	2	33	67	1,97
4. " " Madras ... ..	98	13	12	2,01	3,24
5. " " Bihar and Orissa ... ..	78	17	11	2	1,08
6. " " the Punjab ... ..	1,35	12	37	1,18	3,02
7. " " the United Provinces ... ..	1,10	6	45	15	1,76
8. " " Burma ... ..	71	7	20	19	1,17
9. Delhi Administration ... ..	47	...	3	24	74
10. North Western Railway ... ..	2,98	21	44	17,00	20,63
11. Oudh and Rohilkhand Railway ... ..	18	12	23	...	53
12. Eastern Bengal Railway ... ..	63	...	21	...	84
13. East Indian Railway ... ..	40	...	3	2,73	3,21
14. Bengal Nagpur Railway ... ..					
15. Great Indian Peninsula Railway ... ..					
16. Bombay, Baroda and Central India Railway ... ..					
17. South Indian Railway ... ..	40	...	3	2,73	3,21
18. Royal Indian Marine ... ..	...	...	...	2,32	2,32
19. Ordnance Department, Arsenal ... ..	6	...	55	60	1,21

Information not available.

\*Information not available.

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India	PRODUCT OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From Government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>HARDWARE, METALS AND IMPLEMENTS.</b>					
1. Mints ... ..	42	2	19	1,60	2,23
2. Printing, Stationery and Stamps ... ..	39	...	...	37	76
3. Government of Bombay ... ..	4,43	3	62	53	5,65
4. „ „ Madras ... ..	1,32	5	50	2,01	4,43
5. „ „ Bihar and Orissa ... ..	88	23	28	28	1,67
6. „ „ the Punjab ... ..	3,13	5	1,12	59	4,89
7. „ „ the United Provinces ... ..	3,14	4	52	15	4,15
8. „ „ Burma ... ..	3,63	20	1,08	1,87	6,23
9. Delhi Administration ... ..	2,57	...	43	86	3,36
10. North Western Railway ... ..	6,51	1	6,57	8,83	21,95
11. Oudh and Rohilkhand Railway ... ..	2,05	7	2,29	7	4,43
12. Eastern Bengal Railway ... ..	2,30	17	1,37	1,21	5,05
13. East Indian Railway ... ..	6,19	...	13,30	5,12	21,61
14. Bengal Nagpur Railway ... ..	4,59	...	3,77	1,65	10,01
15. Great Indian Peninsula Railway ... ..	13,40	...	6,48	2,66	22,54
16. Bombay, Baroda and Central India Railway ... ..	13,80	...	2,41	3,31	19,55
17. South Indian Railway ... ..	93	...	23	1,16	2,42
18. Royal Indian Marine ... ..	Information not available.				
19. Ordnance Department, Arsenal ... ..	14	...	60	4,38	5,12

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores of Home Board.	Total.
		From Government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>TIMBER.</b>					
1. Mints ... ..	...	...	16	2	18
2. Printing, Stationery and Stamps ... ..	...	...	1	...	1
3. Government of Bombay ... ..	2	10	36	10	58
4. „ „ Madras ... ..	2	...	87	...	89
5. „ „ Bihar and Orissa ... ..	1	2	22	...	25
6. „ „ the Punjab ... ..	2	...	91	...	93
7. „ „ the United Provinces ... ..	...	1	60	1	62
8. „ „ Burma ... ..	1	1	36	...	38
9. Delhi Administration ... ..	...	1	51	..	52
10. North Western Railway ... ..	4	...	12,29	1	12,34
11. Oudh and Rohilkhand Railway ... ..	...	...	1,09	...	1,09
12. Eastern Bengal Railway ... ..	...	...	...	*	...
13. East Indian Railway ... ..	...	Information not available.			
14. Bengal Nagpur Railway ... ..	...				
15. Great Indian Peninsula Railway ... ..	...				
16. Bombay, Baroda and Central India Railway ... ..	...				
17. South Indian Railway ... ..	...	...	3,52	...	3,52
18. Royal Indian Marine ... ..	...	26	..	19	45
19. Ordnance Department, Arsenal ... ..	...	...	87	...	87

\* Information not available.

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private depts.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>TIMBER.</b>					
1. Mints ... ..	...	...	39	2	41
2. Printing, Stationery and Stamps ... ..	...	...	2	.	2
3. Government of Bombay ... ..	47	9	88	1	1,45
4. " " Madras ... ..	12	4	1,15	...	1,31
5. " " Bihar and Orissa ... ..	1	...	24	...	25
6. " " the Punjab ... ..	1	1	49	...	51
7. " " the United Provinces ... ..	...	...	1,33	...	1,33
8. " " Burma ... ..	1	10	1,15	...	1 26
9. Delhi Administration ... ..	...	...	13	...	63
10. North Western Railway ... ..	...	...	5,98	...	5,98
11. Oudh and Rohilkhand Railway ... ..	...	...	2,29	...	2,29
12. Eastern Bengal Railway ... ..	2,26	81	3,95	...	6,02
13. East Indian Railway ... ..	54	...	10,76	...	11,30
14. Bengal Nagpur Railway ... ..	...	...	3,12	...	3,12
15. Great Indian Peninsula Railway ... ..	...	..	6,24	...	6,24
16. Bombay, Baroda and Central India Railway ... ..	46	...	3,65	...	4,11
17. South Indian Railway ... ..	...	...	1,19	...	1,19
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	59	...	59



TABLE III.—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>HIDES AND LEATHER.</b>					
1. Mints ... ..	1	...	1	1	2
2. Printing, Stationery and Stamps ... ..	1	...	..	...	1
3. Government of Bombay .. ..	12	...	81	...	93
4. „ „ Madras ... ..	3	60	1,29	5	2,05
5. „ „ Bihar and Orissa ... ..	2	...	9	...	11
6. „ „ the Punjab .. ..	1	1	22	...	24
7. „ „ the United Provinces ... ..	2	...	40	...	42
8. „ „ Burma ... ..	2	...	1,20	...	1,22
9. Delhi Administration ... ..	12	...	2	...	14
10. North Western Railway ... ..	8	1	7	8	21
11. Ondh and Rohilkhand Railway ... ..	1	...	10	1	12
12. Eastern Bengal Railway ... ..	23	...	10	...	33
13. East Indian Railway ... ..	18	...	13	...	29
14. Bengal Nagpur Railway ... ..	...	...	..	...	..
15. Great Indian Peninsula Railway ... ..	33	...	69	8	1,10
16. Bombay, Baroda and Central India Railway ... ..	53	...	17	...	70
17. South Indian Railway ... ..	16	...	7	24	47
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	...	..	...



TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
OILS AND PAINTS.					
	Rs.	Rs.	Rs.	Rs.	Rs.
1. Mints .. .. .	2	...	13	1	16
2. Printing, Stationery and Stamps .. .. .	1	...	...	3	4
3. Government of Bombay ... .. .	33	...	27	1	61
4. „ „ Madras ... .. .	21	2	18	15	66
5. „ „ Bihar and Orissa ... .. .	24	...	13	...	37
6. „ „ the Punjab ... .. .	38	...	13	...	51
7. „ „ the United Provinces ... .. .	9	2	12	5	28
8. „ „ Burma ... .. .	13	1	16	2	31
9. Delhi Administration ... .. .	11	...	1	..	12
10. North Western Railway ... .. .	3,96	2	8,57	2,76	15,11
11. Oudh and Rohilkhand Railway ... .. .	4	...	74	...	78
12. Eastern Bengal Railway... .. .	13	...	3	*	16
13. East Indian Railway ... .. .	Information not available.				
14. Bengal Nagpur Railway... .. .					
15. Great Indian Peninsula Railway ... .. .					
16. Bombay, Baroda and Central India Railway ... .. .					
17. South Indian Railway ... .. .	1,26	...	2,38	1,11	4,75
18. Royal Indian Marine ... .. .	...	...	...	89	89
19. Ordnance Department, Arsenals ... .. .	...	...	52	36	88

\* Information not available.

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
OILS AND PAINTS.					
1. Mints ... ..	8	...	28	1	37
2. Printing, Stationery and Stamps .. ..	3	...	...	2	5
3 Government of Bombay .. ..	1,18	...	49	5	1,72
4. „ „ Madras .. ..	82	2	1,23	23	2,30
5. „ „ Bihar and Orissa .. ..	36	...	23	1	60
6 „ „ the Punjab .. ..	91	...	25	3	1,22
7. „ „ the United Provinces .. ..	31	2	59	6	98
8. „ „ Burma .. ..	48	...	1,20	12	1,80
9. Delhi Administration .. ..	51	...	18	...	72
10. North Western Railway ... ..	7,78	28	10,47	1,28	19,81
11. Oudh and Rohilkhand Railway .. ..	1,87	3	1,98	1	3,89
12. Eastern Bengal Railway ... ..	6,02	5	1,98	...	8,05
13. East Indian Railway ... ..	11,90	...	1,33	...	13,23
14. Bengal Nagpur Railway ... ..	1,17	...	1,36	...	2,53
15 Great Indian Peninsula Railway .. ..	18,67	...	8,66	33	22,86
16. Bombay, Baroda and Central India Railway .. ..	5,43	...	90	...	6,33
17. South Indian Railway ... ..	2,45	...	2,91	46	5,82
18. Royal Indian Marine .. ..	Information not available.				
19. Ordnance Department, Arsenal .. ..	1	...	46	78	1,25



TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCT OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>TEXTILES.</b>					
1. Mints ... ..	3	15	3	2	23
2. Printing, Stationery and Stamps ... ..	1	...	8	8	12
3. Government of Bombay ... ..	1,64	24	7,08	12	9,08
4. „ „ Madras ... ..	29	1,42	4,27	51	6 19
5. „ „ Bihar and Orissa ... ..	4	22	2,92	17	3,35
6. „ „ the Punjab ... ..	27	37	4,66	10	5,40
7. „ „ the United Provinces ... ..	6	84	2,48	14	3,52
8. „ „ Burma ... ..	2,18	35	3,45	6	6,04
9. Delhi Administration ... ..	7	...	6	...	13
10. North Western Railway ... ..	49	1	78	16	1,44
11. Oudh and Rohilkhand Railway ... ..	2	...	66	...	68
12. Eastern Bengal Railway ... ..	34	5	92	...	1,31
13. East Indian Railway ... ..	61	...	3,96	...	4,57
14. Bengal Nagpur Railway ... ..	...	...	...	...	...
15. Great Indian Peninsula Railway ... ..	98	...	61	50	2,09
16. Bombay, Baroda and Central India Railway ... ..	12	...	22	...	34
17. South Indian Railway ... ..	4	...	5	...	9
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	2	...	9,34	39	9,75

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCED IN INDIA -		Stores obtained through Director General of Stores or Home Board.	Total.	
		From government factories.	From private dealers.			
	Rs.	Rs.	Rs.	Rs.	Rs.	
CHEMICALS.						
1. Mitts ... ..	...	...	1	1	2	
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...	
3. Government of Bombay... ..	...	27	20	1	6	54
4. " " Madras ... ..	...	7	...	2	13	22
5. " " Bihar and Orissa ... ..	...	2	...	2	2	6
6. " " the Punjab ... ..	...	20	6	1	3	30
7. " " the United Provinces ... ..	...	23	7	8	7	50
8. " " Burma ... ..	...	2	12	16	13	43
9. Delhi Administration ... ..	...	5	...	...	...	5
10. North Western Railway... ..	...	8	...	2	...	10
11. Oudh and Rohilkhand Railway ... ..	...	...	...	1	...	1
12. Eastern Bengal Railway ... ..	...	1	...	...	...	1
13. East Indian Railway ... ..	...	Information not available.				
14. Bengal Nagpur Railway... ..	...					
15. Great Indian Peninsula Railway ... ..	...					
16. Bombay, Baroda and Central India Railway ... ..	...					
17. South Indian Railway ... ..	...	...	...	...	...	...
18. Royal Indian Marine ... ..	...	...	...	...	...	...
19. Ordnance Department, Arsenal ... ..	...	1	...	...	3	4

\* Information not available.

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>CHEMICALS.</b>					
1. Mints ... ..	...	...	11	...	11
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...
3. Government of Bombay ... ..	61	37	10	8	1,16
4. „ „ Madras ... ..	70	2	12	33	1,17
5. „ „ Bihar and Orissa ... ..	10	...	4	1	15
6. „ „ the Punjab ... ..	42	19	7	2	70
7. „ „ the United Provinces ... ..	58	22	17	3	1,00
8. „ „ Burma ... ..	14	25	11	9	59
9. Delhi Administration ... ..	12	3	1	3	19
10. North Western Railway ... ..	8	...	8	...	16
11. Oudh and Rohilkhand Railway ... ..	6	...	7	...	13
12. Eastern Bengal Railway ... ..	25	...	11	...	36
13. East Indian Railway ... ..	48	...	40	...	88
14. Bengal Nagpur Railway .. ...	...	...	...	...	...
15. Great Indian Peninsula Railway ... ..	15	...	6	1	22
16. Bombay, Baroda and Central India Railway ... ..	...	...	...	...	...
17. South Indian Railway ... ..	...	...	...	...	...
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	1	...	...	3	4

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Name.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>STATIONERY.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ... ..	1,58	1	30,39	7,24	39,22.
3. Government of Bombay ... ..	1,53	12	4,90	1,21	7,64
4. „ „ Madras ... ..	33	12	4,37	5,13	9,95
5. „ „ Bihar and Orissa ... ..	14	...	21	5	40
6. „ „ the Punjab ... ..	3	17	12	...	32.
7. „ „ the United Provinces ... ..	4	1	14	3	22
8. „ „ Burma ... ..	...	...	...	...	...
9. Delhi Administration ... ..	...	...	3	...	3.
10. North Western Railway ... ..	94	1	2,18	53	3,66.
11. Oudh and Rohilkhand Railway ... ..	...	...	...	...	...
12. Eastern Bengal Railway ... ..	1	...	...	...	1
13. East Indian Railway ... ..	...	Information not available.			
14. Bengal Nagpur Railway... ..	...				
15. Great Indian Peninsula Railway ... ..	...				
16. Bombay, Baroda and Central India Railway ... ..	...				
17. South Indian Railway ... ..	3	...	12	23	38.
18. Royal Indian Marine ... ..	...	...	...	...	...
19. Ordnance Department, Arsenal* ... ..	...	...	...	...	...

\* Information not available.

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>STATIONERY.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ... ..	2,62	8	53,03	9,08	64,81
3. Government of Bombay ... ..	2,69	10	4,40	2,18	9,37
4. „ „ Madras ... ..	41	47	5,35	2,13	8,36
5. „ „ Bihar and Orissa ... ..	5	3	31	2	41
6. „ „ the Punjab ... ..	6	30	15	...	61
7. „ „ the United Provinces ... ..	5	1	29	6	41
8. „ „ Burma ... ..	10	1	8	...	19
9. Delhi Administration ... ..	1	...	5	...	6
10. North-Western Railway ... ..	14	...	2,11	16	2,41
11. Oudh and Rohilkhand Railway .. ..	9	...	43	2	54
12. Eastern Bengal Railway ... ..	25	1	1,03	...	1,29
13. East Indian Railway ... ..	61	...	2,72	...	3,33
14. Bengal Nagpur Railway ... ..	...	...	...	...	...
15. Great Indian Peninsula Railway ... ..	74	...	1,13	31	2,18
16. Bombay, Baroda and Central India Railway ... ..	1,34	...	2,10	45	3,89
17. South Indian Railway .. ..	12	...	11	13	36
18. Royal Indian Marine .. ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...



TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From Government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>COAL.</b>					
1. Mints ... ..	6	1	72	9	86
2. Printing Stationery and Stamps ... ..	...	...	12	...	12
3. Government of Bombay ... ..	7	2	11	4	24
4. „ „ Madras ... ..	...	...	13	2	17
5. „ „ Bihar and Orissa ... ..	...	...	4	...	4
6. „ „ the Punjab ... ..	...	...	78	...	78
7. „ „ the United Provinces ... ..	1	...	17	...	18
8. „ „ Burma ... ..	4	2	39	...	45
9. Delhi Administration ... ..	...	...	48	...	48
10. North Western Railway ... ..	1,07	...	82,92	4,00	88,00
11. Ondh and Rohilkhand Railway ... ..	...	...	522	...	522
12. Eastern Bengal Railway ... ..	...	Information not available.			
13. East Indian Railway ... ..	...	Information not available.			
14. Bengal Nagpur Railway ... ..	...				
15. Great Indian Peninsula Railway ... ..	...				
16. Bombay, Baroda and Central India Railway ... ..	...				
17. South Indian Railway ... ..	...	...	25,17	1,97	27,14
18. Royal Indian Marine ... ..	23	...	5,68	34	6,25
19. Ordnance Department, Arsenal ... ..	...	...	20	...	20

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>COAL.</b>					
1. Mints ... ..	3	...	1.69	6	1.78
2. Printing, Stationery and Stamps ... ..	...	...	16	...	16
3. Government of Bombay ... ..	26	1	1.29	...	1.56
4.   "   " Madras ... ..	11	...	32	...	43
5.   "   " Bihar and Orissa ... ..	...	...	35	...	35
6.   "   " the Panjab ... ..	7	1	72	...	80
7.   "   " the United Provinces ... ..	...	...	83	...	33
8.   "   " Burma ... ..	20	13	1.76	1	2.10
9. Delhi Administration ... ..	...	...	1.49	...	1.49
10. North Western Railway ... ..	2.93	...	90.53	1.03	94.25
11. Oudh and Rohilkhand Railway ... ..	...	...	7.19	...	7.19
12. Eastern Bengal Railway ... ..	...	...	21.21	...	21.21
13. East Indian Railway ... ..	...	...	12.38	...	12.38
14. Bengal Nagpur Railway ... ..	...	...	17.47	...	17.47
15. Great Indian Peninsula Railway ... ..	...	...	1.17.96	...	1.17.96
16. Bombay, Baroda and Central India Railway ... ..	4	...	47.87	...	47.91
17. South Indian Railway ... ..	...	...	26.51	64	27.15
18. Royal Indian Marine ... ..	...	Information not available.			...
19. Ordnance Department, Arsenal ... ..	...	...	17	...	17

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>CEMENT.</b>					
1. Mints ... ..	...	...	...	...	...
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...
3. Government of Bombay ... ..	...	21	...	3	26
4. „ „ Madras ... ..	...	19	...	24	43
5. „ „ Bihar and Orissa ... ..	...	31	...	3	34
6. „ „ the Punjab ... ..	...	13	...	5	76
7. „ „ the United Provinces ... ..	...	12	...	3	27
8. „ „ Burma ... ..	...	30	...	4	40
9. Delhi Administration ... ..	...	8	...	5	13
10. North Western Railway ... ..	...	10	...	4	31
11. Oudh and Rohilkhand Railway ... ..	...	...	...	...	...
12. Eastern Bengal Railway ... ..	...	6	...	*	6
13. East Indian Railway ... ..	...	Information not available.			
14. Bengal Nagpur Railway ... ..	...				
15. Great Indian Peninsula Railway ... ..	...				
16. Bombay, Baroda and Central India Railway ... ..	...				
17. South Indian Railway ... ..	...	...	...	...	...
18. Royal Indian Marine ... ..	...	...	...	3	3
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

\*Information not available.

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From Government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>CEMENT.</b>					
1. Mints ... ..	...	...	...	1	1
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...
3. Government of Bombay... ..	...	85	3	35	1,68
4. „ „ Madras ... ..	...	51	...	49	1,13
5. „ „ Bihar and Orissa ... ..	...	30	5	37	72
6. „ „ the Punjab ... ..	...	38	...	6	55
7. „ „ the United Provinces ... ..	...	28	2	46	89
8. „ „ Barma ... ..	...	2,67	...	18	2,89
9. Delhi Administration ... ..	...	8	...	66	81
10. North Western Railway ... ..	...	9	...	80	98
11. Oudh and Rohilkhand Railway ... ..	...	1	...	5	6
12. Eastern Bengal Railway ... ..	...	3	...	7	10
13. East Indian Railway ... ..	...	...	...	15	66
14. Bengal Nagpur Railway... ..	...	3	...	3	16
15. Great Indian Peninsula Railway ... ..	...	37	...	1,05	1,42
16. Bombay, Baroda and Central India Railway ... ..	...	17	...	7	34
17. South Indian Railway ... ..	...	...	...	...	...
18. Royal Indian Marine ... ..	...	Information not available.			
19. Ordnance Department, Arsenal ... ..	...	...	...	...	...

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>MISCELLANEOUS.</b>					
1. Mints ... ..	10	7	35	33	85
2. Printing, Stationery and Stamps ... ..	6	...	16	8	30
3. Government of Bombay ... ..	40	7	76	33	1,56
4. „ „ Madras ... ..	16	...	1,17	18	1,51
5. „ „ Bihar and Orissa ... ..	31	2	72	-5	1,13
6. „ „ the Punjab ... ..	34	21	1,27	11	1,93
7. „ „ the United Provinces ... ..	16	6	81	9	1,12
8. „ „ Burma ... ..	35	9	52	24	1,20
9. Delhi Administration ... ..	2,28	2	34	4	2,68
10. North Western Railway ... ..	1,23	2	6,75	5,98	13,98
11. Oudh and Rohilkhand Railway ... ..	4	...	15	...	19
12. Eastern Bengal Railway... ..	29	...	6	*	35
13. East Indian Railway ... ..	}	Information not available.			
14. Bengal Nagpur Railway... ..					
15. Great Indian Peninsula Railway ... ..					
16. Bombay, Baroda and Central India Railway ... ..					
17. South Indian Railway ... ..	17	...	18	74	1,09
18. Royal Indian Marine ... ..	68	...	1,71	...	2,39
19. Ordnance Department, Arsenal ... ..	3	...	81	4,40	5,24

\*Information not available.

TABLE III—contd.

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>MISCELLANEOUS.</b>					
1. Mints ... ..	14	...	64	71	1,49
2. Printing, Stationery and Stamps ... ..	10	...	29	10	49
3. Government of Bombay ... ..	97	5	1,39	62	3,03
4. " " Madras ... ..	74	7	1,44	1,93	4,18
5. " " Bihar and Orissa ... ..	43	13	89	5	1,50
6. " " the Punjab ... ..	71	25	1,83	7	2,86
7. " " the United Provinces ... ..	89	15	1,34	13	2,51
8. " " Burma ... ..	2,08	18	1,80	31	4,37
9. Delhi Administration ... ..	2,37	1	2,23	10	4,71
10. North Western Railway ... ..	4,87	12	3,36	2,42	10,77
11. Oudh and Rohilkhand Railway ... ..	48	...	68	6	1,22
12. Eastern Bengal Railway ... ..	1,11	3	1,11	83	3,08
13. East Indian Railway .. ..	7,76	..	15,20	4,44	27,53
14. Bengal Nagpur Railway .. ..	13,08	...	6,13	49	19,70
15. Great Indian Peninsula Railway ... ..	4,05	...	8,58	26	12,89
16. Bombay, Baroda and Central India Railway ... ..	8,09	...	6,31	1,87	16,27
17. South Indian Railway ... ..	56	...	60	42	1,58
18. Royal Indian Marine ... ..	Information not available.				
19. Ordnance Department, Arsenal ... ..	4	...	1,15	13,92	15,11

TABLE III—*contd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1910-11 to 1913-14.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>ELECTRICAL PLANT AND MATERIALS.</b>					
1. Mints ... ..	1	...	2	2	5
2. Printing, Stationery and Stamps ... ..	...	...	...	1	1
3. Government of Bombay ... ..	11	...	...	...	11
4. „ „ Madras ... ..	9	...	...	13	22
5. „ „ Bihar and Orissa ... ..	10	...	...	...	10
6. „ „ the Punjab ... ..	5	...	...	1	6
7. „ „ the United Provinces ... ..	96	...	...	6	1,02
8. „ „ Burma ... ..	22	...	1	1,91	2,14
9. Delhi Administration ... ..	82	...	...	16	98
10. North Western Railway ... ..	67	...	...	4,19	4,86
11. Oudh and Rohilkhand Railway ... ..	...	...	...	...	...
12. Eastern Bengal Railway ... ..	...	...	...	*	...
13. East Indian Railway ... ..	}	Information not available.			
14. Bengal Nagpur Railway ... ..					
15. Great Indian Peninsula Railway ... ..					
16. Bombay, Baroda and Central India Railway ... ..					
17. South Indian Railway ... ..	25	...	3	2,36	2,64
18. Royal Indian Marine ... ..	...	...	...	27	27
19. Ordnance Department, Arsenals ... ..	1	...	...	54	55

\*Information not available.

TABLE III—*concl'd.*

*Average annual value, in thousands of rupees, of commodities purchased by Government Departments and Railways during the period 1914-15 to 1918-19.*

Names.	Imported stores purchased in India.	PRODUCE OF INDIA—		Stores obtained through Director General of Stores or Home Board.	Total.
		From government factories.	From private dealers.		
	Rs.	Rs.	Rs.	Rs.	Rs.
<b>ELECTRICAL PLANT AND MATERIALS.</b>					
1. Mints ... ..	8	...	1	11	20
2. Printing, Stationery and Stamps ... ..	...	...	...	...	...
3. Government of Bombay ... ..	1,27	...	6	34	1,67
4. „ Madras ... ..	26	...	1	9	36
5. „ Bihar and Orissa ... ..	90	...	4	...	94
6. „ the Punjab ... ..	26	...	...	2	28
7. „ the United Provinces ... ..	88	...	...	8	96
8. „ Burma ... ..	41	...	...	3,01	3,45
9. Delhi Administration ... ..	3,17	...	9	9	3,35
10. North Western Railway ... ..	1,69	...	30	1,58	3,57
11. Oudh and Rohilkhand Railway ... ..	37	...	2	14	53
12. Eastern Bengal Railway ... ..	1,20	...	5	27	1,52
13. East Indian Railway ... ..	1,42	...	...	1,31	2,73
14. Bengal Nagpur Railway ... ..	1,86	...	7	1,47	3,40
15. Great Indian Peninsula Railway ... ..	2,42	...	59	1,50	4,51
16. Bombay, Piroda and Central India Railway ... ..	1,99	...	...	72	2,61
17. South Indian Railway ... ..	35	...	6	71	1,12
18. Royal Indian Marine ... ..	...	Information not available.			...
19. Ordnance Department, Arsenal ... ..	2	...	...	1,88	1,90



TABLE IV.

*Value, in thousands of rupees, of imported stores purchased in India during the years 1907-08 to 1913-14.*

Description of class.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
	Rs. ...	Rs. 5	Rs. / ...	Rs. ...	Rs. ...	Rs. 6	Rs. 6
1. Agricultural implements ...	...	...	...	...	...	6	6
2. Apparel ...	...	...	...	...	...	46	46
3. Building and Engineering materials ...	...	...	...	...	...	11.01	12.47
4. Canvas ...	...	...	...	...	...	55	70
5. Chemicals, drugs and Medicines ...	...	...	...	...	...	16	4
6. Cordage and rope ...	...	...	...	...	...	16	23
7. Cotton linen and silk goods ...	...	...	...	...	...	1.86	1.30
8. Glass and glassware ...	...	...	...	...	...	37	20
9. Hardware and cutlery ...	...	...	...	...	...	61	36
10. Hides and skins ...	...	...	...	...	...	8	...
11. Scientific instruments, etc. ...	...	...	...	...	...	10	22
12. Leather and manufactures of leather ...	...	...	...	...	...	12	5
13. Machinery and plant ...	...	...	...	...	...	10.99	23.74
14. Iron and Steel ...	...	...	...	...	...	6.02	7.68
15. Brass, copper, lead, tin, zinc and other undistinguished metals	...	...	...	...	...	77	72
16. Oils ...	...	...	...	...	...	38	39
17. Paints and colours ...	...	...	...	...	...	50	49
18. Paper and pasteboard ...	...	...	...	...	...	20	41
19. Pitch and tar ...	...	...	...	...	...	7	16
20. Printing and Lithographic materials	...	...	...	...	...	42	25
21. Soap ...	...	...	...	...	...	...	...
22. Tools ...	...	...	...	...	...	00	48
23. Stationery ...	...	...	...	...	...	1.84	2.75
24. Wire, Iron and Steel ...	...	...	...	...	...	85	1.17
25. Woollen goods ...	...	...	...	...	...	5	8

TABLE IV—*concl'd.*

*Value, in thousands of rupees, of imported stores purchased in India during the years 1914-15 to 1918-19.*

Description or class.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	Rs.	Rs.	Rs.	Rs.	Rs.
1. Bridge work ... ..	2,91	2,75	3,15	1,85	52
2. Engineers' plant, excluding petty tools .	7,23	3,80	5,27	3,61	3,12
3. Workshop machinery and heavy tools ...	3,86	1,83	4,06	4,52	7,63
4. Locomotives ... ..	3,61	1,72	1,58	2,19	3,92
5. Coaching and goods stock ... ..	3,62	2,56	2,53	4,00	6,34
6. Building and station materials and fencing.	15,32	16,69	11,85	13,39	8,69
7. Tools and cutlery ... ..	3,31	2,80	3,11	5,15	8,14
8. Hardware ... ..	6,66	5,87	6,28	10,46	11,97
9. Wire ... ..	1,39	1,51	2,42	2,99	7,38
10. Iron and Steel ... ..	8,52	8,83	11,48	28,87	19,95
11. Brass, copper, lead, tin, zinc and miscellaneous.	5,60	6,51	4,37	8,01	7,36
12. Timber, other than indigenous ... ..	9,71	27	82	51	1,80
13. Hides and Skins ... ..	5	10	15	19	7
14. Leather and manufactures of leather ...	61	51	75	87	58
15. Paints and Colours ... ..	3,28	2,77	4,19	4,95	4,47
16. Oils ... ..	13,51	11,99	19,31	17,24	41,32
17. Canvas ... ..	95	1,86	2,09	2,67	23
18. Cotton, linen and silk goods, ... ..	3,70	4,30	5,46	6,20	5,32
19. Woollen Goods ... ..	81	1,19	3,47	1,95	1,48
20. Miscellaneous apparel and equipment ...	73	99	1,03	1,67	1,49
21. Cordage and rope ... ..	48	49	41	61	66
22. Chemicals, drugs and medicines ... ..	2,68	2,76	3,80	5,27	5,89
23. Scientific instruments ... ..	97	80	1,66	4,90	3,34
24. Paper and pasteboard ... ..	1,23	85	2,05	2,62	4,90
25. Stationery ... ..	3,37	2,89	3,16	4,85	6,07
26. Printing and lithographic materials ...	61	66	54	1,28	96
27. Earthenware, glass and glassware ... ..	1,77	1,36	1,81	1,85	2,03
28. Pitch and tar ... ..	21	15	25	55	57
29. Soap ... ..	16	8	19	16	18
30. Miscellaneous ... ..	4,19	5,69	5,23	7,18	9,25
31. Electrical plant and materials ... ..	10,91	6,60	8,33	12,61	18,17

N.B.—The difference between the headings in the description column for the periods 1907-14 and 1914-19 is due to a revised classification having been introduced from 1914.



TABLE V—concl'd.

*Expenditure, in thousands of rupees, on stores produced in India during the years 1914-15 to 1918-19.*

Description or class.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	Rs.	Rs.	Rs.	Rs.	Rs.
1. Bridge work ... ..	4,61	2,88	1,50	18	29
2. Engineers' plant, excluding petty tools ...	3,22	50	68	53	91
3. Workshop machinery and heavy tools ...	37	28	13	52	69
4. Locomotives ... ..	32	24	7	1,09	48
5. Coaching and goods stock ... ..	16,08	7,25	5,37	25,46	49,20
6. Building and station materials and fencing.	10,13	8,54	8,85	6,25	7,74
7. Tools and cutlery ... ..	1,10	79	86	1,47	2,16
8. Hardware .. ..	2,92	3,16	3,59	4,31	3,90
9. Wire ... ..	22	4	7	7	1,53
10. Iron and Steel ... ..	31	6,67	37	10,99	17,36
11. Brass, copper, lead, tin, zinc and miscellaneous.	92	1,19	2,33	1,93	2,50
12. Timber, other than indigenous ... ..	...	...	...	48	...
13. Hides and Skins ... ..	71	68	65	57	63
14. Leather and manufactures of Leather ...	4,85	5,13	5,36	5,50	5,84
15. Paints and Colours ... ..	2,76	2,09	2,60	3,35	3,74
16. Oils ... ..	12,04	11,61	19,59	17,51	26,36
17. Canvas ... ..	1,14	99	1,47	1,54	1,77
18. Cotton, linen and silk goods ... ..	15,64	18,96	17,79	24,80	37,62
19. Woollen goods ... ..	5,58	6,66	9,42	10,81	11,50
20. Miscellaneous apparel and equipment ...	2,93	2,65	1,97	2,21	1,98
21. Cordage and rope ... ..	1,22	1,42	2,10	1,80	2,31
22. Chemicals, drugs and medicines ... ..	2,21	2,31	2,86	3,05	4,87
23. Scientific instruments ... ..	23	14	23	71	43
24. Paper and pasteboard ... ..	35,79	37,91	50,40	77,16	92,61
25. Stationery ... ..	1,77	3,86	4,24	4,72	6,62
26. Printing and lithographic materials ...	3,90	2,55	3,26	4,37	1,18
27. Earthenware, glass and glassware ... ..	57	48	89	76	1,85
28. Pitch and tar ... ..	1,11	33	39	55	73
29. Soap ... ..	16	12	14	19	21
30. Miscellaneous ... ..	4,75	5,16	4,01	6,24	9,59
31. Electric plant and materials ... ..	24	31	48	29	33

N.B.—The difference between the headings in the description column for the periods 1907-14 and 1914-19 due to a revised classification having been introduced from 1914.

**TABLE VI.**  
*Expenditure in England during the years 1904-05 to 1909-10 on stores procured for shipment to India.*

Head of Service.	PAYMENTS FOR STORES MADE DURING—					
	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.
1. Mints	£	£	£	£	£	£
2. Stationery and Printing	13,463	10,432	35,251	42,063	32,339	19,835
3. Stamps	92,038	82,425	107,567	130,381	119,850	109,078
4. Posts and Telegraphs	38,432	41,417	98,463	105,449	134,354	101,522
5. Public Works Department	205,883	325,467	263,201	179,615	118,395	90,593
6. Railways	59,781	82,530	87,893	103,348	71,369	54,850
7. Marine	1,168,772	1,865,382	2,046,249	2,204,191	3,124,546	1,980,849
8. Army Department, excluding Clothing and Ordnance and Miscellaneous	181,053	141,854	247,285	102,424	87,296	61,286
9. Army Department, Clothing and Ordnance and Miscellaneous	888,024	866,020	204,075	230,540	150,238	176,855
10. All other stores	1,384,911	617,402	1,449,905	493,097	491,071	350,223
	279,116	287,421	327,721	430,906	471,347	341,047
Total	4,262,373	4,321,250	4,803,650	4,022,604	4,801,311	3,292,144
Total freight charges on above	140,794	147,420	153,763	158,775	212,308	155,149

TABLE VI—*concd.*

*Expenditure in England during the years 1910-11 to 1917-18, on stores procured for shipment to India.*

Head of Service.	Payments for stores made during—									
	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.		
1. Mint ... ..	£ 10,369	£ 16,098	£ 13,204	£ 21,362	£ 15,625	£ 8,281	£ 14,604	£ 27,672		
2. Stationery and Printing ... ..	112,818	95,400	81,986	95,822	102,513	98,873	105,881	115,843		
3. Stamps ... ..	78,096	88,350	88,184	103,995	53,642	85,507	103,603	108,700		
4. Posts and Telegraphs ... ..	92,129	145,837	135,450	159,991	150,444	166,354	265,206	216,175		
5. Public Works Department ... ..	74,252	173,829	142,611	127,446	127,630	67,520	27,863	— 1,014		
6. Railways ... ..	1,731,493	1,985,986	2,252,309	2,757,411	2,257,232	777,630	288,056	403,824		
7. Marine ... ..	71,518	58,687	77,443	100,429	75,552	401,448	1,084,085	222,079		
8. Army Department, excluding Clothing and Ordnance and Miscellaneous ... ..	145,595	211,866	200,596	206,104	221,676	537,230	2,995,799	3,074,716		
9. Army Department, Clothing and Ordnance and Miscellaneous ... ..	346,646	391,301	548,580	578,752	585,900	1,186,677	3,072,080	4,841,862		
10. All other stores ... ..	279,230	373,031	394,185	428,321	458,062	283,865	294,873	204,971		
Total	2,942,146	3,540,385	3,934,578	4,587,633	4,046,276	3,612,891	8,252,053	9,214,817		
Total freight charges on above	130,419	201,585	238,080	298,567	245,581	193,308	264,678	227,396		

TABLE VII.

*Value, in thousands of pounds sterling, of principal Government stores imported into British India by sea during the years 1907-08 to 1919-20.*

Articles.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.
1. Apparel, including boots and shoes	£ 39	57	31	23	16	25	42	62	92	453	580	1,240	424
2. Arms, ammunition, etc.	283	105	74	143	94	146	350	216	129	396	1,826	953	1,044
3. Books and printed matter	88	116	65	89	89	15	5	9	8	5	4	2	4
4. Building and Engineering materials	55	52	40	23	65	83	90	67	42	43	*	*	*
5. Chemicals, drugs and medicines	00	47	72	67	77	122	78	73	183	312	355	328	312
6. Coal, coke and patent fuel	3	23	48	18	60	103	276	58	17	6	11	41	1
7. Cotton manufactures	42	42	38	30	42	23	26	37	42	353	733	546	297
8. Flax manufactures	20	29	41	18	23	30	23	39	91	503	525	293	297
9. Hardware and cutlery	321	208	233	155	196	176	227	264	296	541	334	604	870
10. Instruments and apparatus	116	136	11	95	123	140	137	183	174	268	326	307	419
11. Machinery and millwork	181	256	185	166	211	172	204	213	129	138	177	285	447
12. Metals	540	380	338	323	401	471	532	482	921	1,012	1,022	1,293	1,667
13. Paper, stationery, etc.	126	124	103	97	80	116	189	156	146	253	162	287	403
14. Railway plant and rolling stock	1,791	3,013	1,967	1,294	1,680	1,695	2,685	2,273	979	163	327	421	4,462
15. Ships, parts of	268	2	2	16	9	12	26	8	13	568	324	12	20
16. Telegraph materials	105	63	64	71	86	72	101	102	80	126	150	142	579
17. Woollen manufactures	97	59	33	34	78	34	40	54	75	216	955	2,424	690
18. All other articles	291	291	282	239	321	316	342	352	705	1,690	1,475	3,793	1,794
Total	4,423	5,008	3,827	2,901	3,654	3,754	5,373	4,608	4,122	7,076	9,287	13,019	13,730

\* Included under all other articles.

TABLE VII--concl'd.

*Value, in thousands of pounds sterling, of imports of principal articles of private merchandise into British India by sea from foreign countries during the years 1907-08 to 1919-20.*

Articles.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.
1. Apparel, including boots and shoes	£ 1,003	918	976	£ 1,35	£ 1,394	£ 1,517	£ 1,669	£ 1,079	£ 1,173	£ 1,411	£ 1,053	£ 1,437	£ 1,966
2. Arms, ammunition, etc.	325	217	105	216	215	245	237	214	196	235	103	257	372
3. Books and printed matter	221	259	212	264	304	282	319	355	178	298	317	319	424
4. Building and Engineering materials	351	411	382	467	481	614	767	648	711	687	755	544	1,210
5. Chemicals, drugs and medicines	1,129	977	1,128	1,222	1,364	1,325	1,57	1,308	1,702	2,181	2,704	2,610	3,435
6. Coal, coke and patent fuel	396	548	484	381	312	773	711	123	181	103	50	157	129
7. Cotton manufactures	35,51	25,697	26,471	29,022	33,193	42,030	44,381	37,800	28,915	35,522	37,953	41,174	59,758
8. Flax manufactures	178	166	111	175	194	228	284	237	260	439	270	200	121
9. Hardware and cutlery	2,035	1,869	1,742	2,672	2,299	2,438	2,821	1,866	1,660	2,174	1,917	2,267	4,718
10. Instruments and apparatus	865	768	680	778	867	980	1,214	891	869	1,162	1,150	1,415	2,220
11. Machinery and Millwork	4,874	4,554	3,522	3,379	3,011	3,611	5,172	4,027	3,185	3,632	2,949	3,336	9,018
12. Metals	8,785	8,621	8,470	9,613	9,477	10,135	14,710	9,180	7,462	7,157	6,882	10,701	22,769
13. Paper, stationery, etc.	97	910	693	1,101	1,153	1,381	1,525	1,256	1,240	2,071	1,971	2,280	3,127
14. Railway plant and rolling stock	4,01	4,947	3,621	2,880	2,958	4,269	6,580	6,72	3,912	1,046	331	696	4,587
15. Ships, parts of	199	251	213	66	41	97	151	201	95	69	174	137	205
16. Telegraph materials	...	...	...	...	...	...	...	...	...	...	6	4	2
17. Woollen manufactures	1,921	1,914	1,460	2,121	2,301	2,174	2,701	1,356	704	1,181	1,183	1,542	1,673
18. All other articles	26,119	17,703	27,219	30,717	32,85	35,037	37,400	29,301	36,205	40,127	40,155	13,530	91,813
Total	86,170	83,850	78,010	86,216	92,383	107,332	122,165	91,563	87,991	97,743	100,283	112,659	209,000



TABLE VIII.

*Distribution of expenditure, in thousands of pounds sterling, on stores between the Store Department, India Office, Consulting Engineers, War Office, etc., during the years 1910-11 to 1918-19.*

Year.	INDIA STORE DEPT.		CONSULTING ENGINEERS.		ADMIRALTY.		WAR OFFICE.		NAVAL ARCHITECT.		Total.
	Value of stores inspected.	Percentage on total.	Value of stores supplied.	Percentage on total.	Value of stores supplied.	Percentage on total.	Value of stores supplied.	Percentage on total.	Value of stores supplied.	Percentage on total.	
1910-11	£		£		£		£		£		£
...	...	...	...	...	...	...	...	...	...	...	...
1911-12	1,081	30.7	1,731	58.9	4	0.1	97	3.3	28	1.0	2,941
...	...	...	...	...	...	...	...	...	...	...	...
1912-13	1,346	38.0	1,986	56.1	6	0.2	144	4.1	5	1.6	3,540
...	...	...	...	...	...	...	...	...	...	...	...
1913-14	1,366	34.7	2,252	57.2	4	0.1	231	5.9	31	2.1	3,934
...	...	...	...	...	...	...	...	...	...	...	...
1914-15	1,695	7.0	2,757	60.1	9	0.2	111	2.4	15	0.3	4,537
...	...	...	...	...	...	...	...	...	...	...	...
1915-16	1,666	41.3	2,257	55.8	2	...	87	2.2	34	0.8	4,016
...	...	...	...	...	...	...	...	...	...	...	...
1916-17	2,400	68.1	778	21.5	7	0.2	65	1.8	302	8.4	3,612
...	...	...	...	...	...	...	...	...	...	...	...
1917-18	4,916	51.1	289	9.0	9	0.1	2,427	25.4	1,922	20.1	9,552
...	...	...	...	...	...	...	...	...	...	...	...
1918-19	4,029	37.2	404	3.8	11	0.1	5,849	54.1	525	4.8	10,818
...	...	...	...	...	...	...	...	...	...	...	...
1918-19	5,837	41.0	5.7	4.3	23	0.2	6,695	50.4	141	1.0	13,273



TABLE X.

*Cash expenditure, in thousands of rupees, incurred in India by the Indian Munitions Board from 1917-18 to December 1919.*

Particulars	1917-18.	1918-19.	1919-20 (up to December 1919.)
	Rs.	Rs.	Rs.
<b>I.—SALARIES, ESTABLISHMENTS, ETC.</b>			
(a) Headquarters ... ..	7,73	19,00	8,02
(b) Provincial ... ..	9,85	35,89	16,50
Total I. ..	1,761	57,79	24,58
<b>II.—SUPPLIES.</b>			
(a) Rivercraft and Inland Water Transport Stores ..	1,50,57	1,29,03	12,59
(b) Tata's rails and Fishplates ... ..	1,05,16	30,67	3,73
(c) Other railway materials ... ..	1,16,82	1,24,90	73 80
(d) Timber ... ..	87,56	2,74,71	60,11
(e) Textiles and Jute ... ..	85,70	1,68,46	1,01,52
(f) Ordnance and Miscellaneous Stores ... ..	2,63,83	16,50,75	3,70,91
Total II. ..	8,38,64	21,06,12	6,37,69
<b>III.—FACTORIES, ETC.</b>			
(a) Army Clothing Factories ... ..	3,87,67	12,08,68	3,51,61
(b) Ordnance Factories ... ..	67,71	4,31,74	1,42,71
(c) Acetone Factory. ... ..	1,03	1,55	1,24
(d) Albion Shell Factory ... ..	6,69	13,93	2,88
(e) Tanneries and Tanstuff ... ..	15,35	17,14	7 3
(f) Kutra Iron Works ... ..	1,37	2,25	5 3
(g) Tent-making Factory ... ..	...	5,14	7 1
Total III. ..	4,79,91	16,80,43	5,60,52
Grand total ..	13,36,19	41,42,34	11,62,79

## APPENDIX B.

\* List of non-dangerous petroleum installations licensed during the year 1906.

Province.	District.	No.	Province.	District.	No.
Ajmer-Merwara . . . .	Ajmer . . . . .	3	Bombay—contd. . . .	Poona . . . . .	3
	TOTAL . . . . .	3		Satara . . . . .	2
Bengal . . . . .	Balasore . . . . .	2		Sholapur . . . . .	4
	Bhagulpur . . . . .	5		Surat . . . . .	5
	Birbhum . . . . .	3		Thana . . . . .	2
	Burdwan . . . . .	7		TOTAL . . . . .	64
	Calcutta . . . . .	6	Burma . . . . .	Hanthawaddy . . . .	3
	Champaran . . . . .	1		Mergui . . . . .	3
	Chapra . . . . .	1		Mingyan . . . . .	1
	Cuttack . . . . .	1		Pokoku . . . . .	3
	Darbhanga . . . . .	4		Thayetmyo . . . . .	1
	Darjeeling . . . . .	1		TOTAL . . . . .	11
	Gaya . . . . .	4	Central Provinces . . .	Akola . . . . .	6
	Howrah . . . . .	1		Amraoti . . . . .	7
	Khulna . . . . .	1		Bhandara . . . . .	3
	Manbhum . . . . .	1		Bilaspur . . . . .	1
	Midnapur . . . . .	1		Buldana . . . . .	3
	Monghyr . . . . .	4		Chanda . . . . .	1
	Mozufferpur . . . . .	6		Hoshangabad . . . .	2
	Murshedabad . . . . .	1		Jubbulpur . . . . .	6
	Nadia . . . . .	4		Nagpur . . . . .	3
	Palamau . . . . .	1		Narsinghpur . . . . .	2
	Patna . . . . .	4		Nimar . . . . .	5
	Purnea . . . . .	2		Raipur . . . . .	1
	Sambalpur . . . . .	2		Saugor . . . . .	3
	Santal Parganas . . . .	5		Seoni . . . . .	1
	Shahabad . . . . .	3		Wardha . . . . .	5
	24-Parganas . . . . .	3		TOTAL . . . . .	49
	TOTAL . . . . .	74	Eastern Bengal and Assam .	Backergan . . . . .	1
Bombay . . . . .	Ahmedabad . . . . .	5		Bogra . . . . .	1
	Ahmednagar . . . . .	2		Chittagong . . . . .	2
	Belgaum . . . . .	3		Dinajpur . . . . .	1
	Bijapur . . . . .	4		Jalpaiguri . . . . .	1
	Bombay . . . . .	3		Mymensingh . . . . .	1
	Broach . . . . .	4		Pabna . . . . .	2
	Dharwar . . . . .	10		Rajshaye . . . . .	2
	Karachi . . . . .	5			
	Khandesh . . . . .	7			
	Nasik . . . . .	5			

\* This list includes some godowns for the storage of non-dangerous petroleum regarding which this Department has been consulted.



# APPENDIX C.

Accidents by fire or explosion which have been brought to the notice of the Explosives Department from 1st January 1906 to 31st December 1906.

No.	Date of accident.	Nature of Explosion.	Where accident occurred.	Circumstances of accident so far as ascertained.	NUMBER OF PERSONS	
					Killed.	Injured.
Explosives.						
1	11th Feb. 1906	Gunpowder	Pothipuram, Salem	The Magistrate reported that a native finding that some gunpowder, which he used for blasting, did not explode mixed some charcoal with it and got a cooly to pound it in a stone mortar with an iron crowbar when it exploded injuring both men.	1	1
2	3rd Mar. 1906	Do.	Pandanallur, Tanjore.	The Magistrate reported that an explosion occurred owing to a native taking a naked lamp into a room where gunpowder was stored and a spark from the lamp fell on the powder. The man managed to rush out of the room but sustained slight injuries.	...	1
3	7th Mar. 1906	Do.	Satyamangalam, Coimbatore.	The Magistrate reported that while a well was being excavated, a native carelessly rested the lighted end of a fuse on some gunpowder lying close to the mouth of the well. This exploded and injured him so severely that he died subsequently.	1	...
4	28th Mar. 1906	Do.	Elephanta	Messrs. Price, Wills and Reeves had been carrying on blasting operations at Elephanta for eighteen months in order to get stone for the New Docks at Bombay. During this time there had been no accident, but on this particular date, although the usual charges of powder were being used, the charge instead of simply displacing the hill-side as it usually had done, seemed to blow through and propelled the debris like a cannon ball to a considerable distance, killing and injuring a number of coolies who were about 83 yards off. Two Europeans in charge of the operations, who were only about 40 yards off, escaped without injury. A fault or crack in the hill-side was the cause of the charge blowing through, and the disaster was the subject of a special inquiry by the Chief Inspector of Explosives who submitted a report on the circumstances to the Government of India and Bombay Government.	11	25
5	10th Apl. 1906	Do.	Kalarampatti, Salem.	The Magistrate reported that while a native was charging a hole with gunpowder, clay and small pieces of stones for blasting operations in a well, the charge exploded and injured him so seriously that he died two days after.	1	...
6	1st July 1906	Do.	Coimbatore	The District Magistrate reported an explosion which so severely injured a native lad that he died. He was engaged in the excavation of a well and the explosion was due to the lad carelessly handling the fuse from which sparks fell on the gunpowder lying loose near the mouth of the well.	1	...
7	7th Aug. 1906	Do.	Malagoundenvalasai, Salem.	The Magistrate reported that while a native was extracting a needle from a charge of gunpowder, an explosion occurred, which caused him fatal injuries.	1	...
8	10th Aug. 1906	Do.	Shevapet, Salem	While blasting operations were being carried out in a well, one charge missed fire. This charge was then partially removed and while another hole was being drilled alongside that from which the unexploded charge was partially extracted, the gunpowder exploded and caused fatal injuries to a native.	1	...
9	21st Aug. 1906	Do.	Wardha	The Assistant Commissioner reported that it is presumed that a native took a lighted candle into a room in which were stored gunpowder, percussion caps, fuses and fireworks and dropped the candle on some gunpowder which he was handling, with the result that there was an explosion and the man was fatally injured.	...	1
10	28th Sept. 1906	Do.	Trichnopoly	The Magistrate reported that while a native was filling an iron measure with gunpowder it exploded, killing him.	1	...
11	7th Oct. 1906	Do.	Mangalore	The District Magistrate reported that while a native girl was carrying some fire to cook her food, a spark fell on some gunpowder which was spread to dry in the sun and which ignited, causing her serious injuries resulting in death.	1	...

No.	Date of accident.	Nature of Explosion.	Where accident occurred.	Circumstances of accident so far as ascertained.	NUMBER OF PERSONS	
					Killed.	Injured.
Explosives--contd.						
12	20th Nov. 1906	Gunpowder	Northern Mon- canal, Minbu.	The Deputy Commissioner reported that a Pathan cooly while going to light a fuse attached to a blasting charge, carelessly struck a match over a bowl containing some gunpowder-which got ignited and exploded.	1	
13	25th Nov. 1906	Do.	Calicut	The Magistrate reported that a native went into a room, in which 20 lbs gunpowder was stored, with a light in his hand. By some accident the powder took fire and the man was so seriously injured that he died from the effects.	1	
TOTAL					2	
14	27th Mar. 1906	Dynamite	Thwe-C houk, Choung, Thayet- myo.	The District Superintendent of Police, Thayetmyo, reported that a Burman with coolies was blasting rocks, and that after laying a charge he fired it, having first ordered the coolies to run from the shot. All did so except one, who stayed behind, and when the charge exploded, he was killed.		
15	12th July 1906	Do.	Martaban	The Deputy Commissioner, Thaton, reported that owing to a misfire of a dynamite cartridge, while blasting operations were being conducted, two natives were seriously injured by attempting to remove the debris with crowbars.	...	
TOTAL						
16	25th July 1906	Fireworks con- sisting of chlorate of potash and red arsenic and sulphur.	Hooghly	The Magistrate reported that on the occasion of a wedding party, a native under the influence of liquor came and joined the party and began lighting bombs in spite of the remonstrances of the people. One of the bombs burst in his hand causing such severe injuries that he died from the effects.		
17	14th Aug. 1906	Fireworks con- sisting of salt- petre, sulphur and charcoal.	Calcutta	The Commissioner of Police reported that an assistant in a fire-workshop brought some fire-works to a baker and asked to be allowed to place the fire-works near an oven as they were wet. While conversing with the baker who was objecting to permitting this, the bundle of fire-works somehow got ignited and exploded, injuring both of them.	...	
18	21st Sept. 1906	Crackers con- sisting of sul- phur, chlorate of potash and small stones.	Calcutta	The Inspector of Police reported that, while a native was preparing the crackers, one of them exploded, injuring him.	..	
19	2nd Oct. 1906	Fireworks con- sisting of chlorate of potash and sulphide of arsenic.	Budaun	The Magistrate reported that while three men were making fire-works an explosion took place, killing one of them and injuring the other two.		
20	17th Oct. 1906	Fireworks con- sisting of sul- phur, nitre and potash.	Coimbatore	The Magistrate reported that a boy had prepared some fire-works and placed them on the ground. Two other boys began firing crackers nearby and a spark from the crackers fell on the fireworks and caused an explosion fatally injuring one of the boys and causing slight injuries to the other two.		
21	17th Oct. 1906	Fireworks con- sisting of chlorate of potash, sulphide of arsenic and stones.	Calcutta	The Commissioner of Police reported that a native was opening a tin box containing the mixed ingredients and smoking a cigarette at the time and a portion of the burnt cigarette fell into the box causing an explosion injuring him severely.	..	
22	18th Oct. 1906	Fireworks (Throwdowns) consisting of sulphide of arsenic and chlorate of potash.	Calcutta	The Commissioner of Police reported that while a native lad was making these fire-works the materials exploded, injuring him and two others who were near by.	..	
23	Oct. 1906	Fireworks (Throwdowns) consisting of sulphide of arsenic and chlorate of potash.	Ichapur, Parganas.	24 The Magistrate reported that while a native lad was playing with fire-works, they exploded, causing serious injuries which resulted in the amputation of his left hand.	..	

No.	Date of accident.	Nature of explosives.	Where accident occurred.	Circumstances of accident so far as ascertained.	NUMBER OF PERSONS.	
					Killed.	Injured.

**Explosives—contd.**

24	16th Nov. 1906 .	Fireworks consisting of sulphide of arsenic and chlorate of potash.	Calcutta .	The Commissioner of Police reported that while a native lad was filling an iron tube with red arsenic and chlorate of potash, the mixture exploded injuring him.	...	1
25	22nd Nov. 1906 .	Fireworks consisting of sulphide of arsenic and chlorate of potash.	Bombay .	The Inspector, Arms Department, reported that a native was manufacturing explosive bombs consisting of chlorate of potash and red arsenic with small stones, and whilst the composition was being mixed in his hands it exploded.	...	1
26	19th Dec. 1906 .	Fireworks consisting of sulphide of antimony and chlorate of potash.	Godarvara .	The Magistrate reported that while a native was grinding sulphide of antimony and chlorate of potash together on a flat piece of stone, the ingredients exploded, injuring him so severely that he died from the effects.	1	...
Total					4	14

### Petroleum.

27	9th Mar. 1906 .	Kerosine .	Kirkee .	The Police reported that a native lad went into a room with a lamp in his hands to fill another lamp with oil. The lamp fell from his hands and immediately a fire broke out. There were about 30 to 40 tins of kerosine in the room. The boy was burnt to ashes.	1	...
28	19th Mar. 1906 .	Kerosine .	Rangoon .	A fire occurred in the premises of a general merchant and oilman stores dealer due to a lamp being upset on some inflammable articles.	...	...
29	23rd Mar. 1906 .	Kerosine .	Bombay .	While a native woman was cooking, a child who was standing near by upset a kerosine lamp. The woman was severely burnt and died from the effects.	1	...
30	16th April 1906 .	Kerosine .	Budge Budge .	The Superintendent, Petroleum Wharf, Budge Budge, reported that during shunting operations an oil tank wagon took fire and it is believed that as the tank was leaking, some oil must have fallen on some live cinders that were lying under the wagon. Steps have been taken to have an ash pit, and drivers of engines have been instructed to clear out their ash pans at intervals.	...	...
31	28th April 1906 .	Kerosine .	Bhawanipur .	The Inspector of Police reported that a native woman was pouring oil into a lighted kerosine oil lamp, when the lamp accidentally fell into a tin of oil which took fire and at once spread, destroying the hut and injuring four people, who subsequently died.	4	...
32	8th May 1906 .	Kerosine .	Jubbulpur .	The Deputy Commissioner reported that a railway tank wagon was connected to the bulk oil tank of the Standard Oil Company, and about 4-30 P.M. pumping operations were commenced. All went well till 8-15 P.M. when a native struck a match and looked into the tank wagon holding the match before him, to see how much oil was left. An instantaneous explosion occurred and the native was hurled into the air and on to the permanent way where his body, charred almost beyond recognition, was afterwards recovered some 6 yards or so from the foot of the tank wagon. The Local Agent was prosecuted for working after sunset.	1	1
33	28th May 1906 .	Kerosine .	Calcutta .	The Commissioner of Police reported that while a native woman was filling a lighted kerosine oil lamp from a canister containing kerosine oil, she accidentally set fire to the oil in the canister which exploded, fatally injuring the woman and a boy and severely injuring a girl.	2	1
34	28th May 1906 .	Kerosine .	Kidderpore, Calcutta.	The Commissioner of Police reported that a cart containing drums of kerosine oil had been placed close to a kerosine shop and that 4 or 5 drums had been shifted into the shop, when one of the drums which was on the cart was observed to be on fire. Some natives began to pull away the cart, but in doing so the lighted drum fell into the shop and set the whole place on fire, together with a number of other shops that were near by. It is believed that some one must have been smoking near the cart.	...	...



No.	Date of accident.	Nature of Explosion.	Where accident occurred.	Circumstances of accident so far as ascertained.	NUMBER OF PERSONS	
					Killed.	Injured.

### Petroleum—*contd.*

35	9th Nov. 1906	Crude oil	Yenangyaung	The Sub-Divisional Officer reported that a hut that was situated near oil well No. 160 of the Burma Oil Company through some cause unknown caught fire and as it burnt, the gas and oil escaping from the well ignited and the well burst into flames. The derrick and machinery on the well was completely burnt and the native owner of the hut was injured.	...	1
36	24th Dec. 1906	Petroleum	Rangoon	An oil flat, which had been carrying oil, was being steamed and cleansed from oil vapour, and residue oil, by the Irrawaddy Company's employes at Dalla Dockyard on the banks of the Rangoon River opposite Rangoon, and from some cause not absolutely ascertained the vapour outside the flat got ignited with the result that the contents of the flat got also ignited accompanied by a severe explosion, which luckily caused no loss of life or injuries. This accident was the subject of a special enquiry by the Chief Inspector of Explosives.	...	...
Total					9	3

### Miscellaneous.

37	22nd Aug. 1906	Matches	Sukea's Lane, Calcutta.	The Commissioner of Police reported that after a case of matches known as "Bengal Coloured Lights" had been removed from one godown to another and stacked away, smoke was seen issuing from it. The fire spread to 3 other cases of matches before it was extinguished.	...	...
38	28th Aug. 1906	French Polish	Poona	The Magistrate reported that while a native was pouring some French Polish from a tin into a bottle near a fire-place some of the polish fell into the fire and thereby caused an explosion, injuring the man so severely that he died from the effects.	1	...
39	11th Nov. 1906	Methylated spirits.	Calcutta	The Commissioner of Police reported that the Chief Officer of the S. S. <i>Hymethus</i> and the Chief Officer of the S. S. <i>Colquhoun</i> went into the hold of the former vessel with two buckets of sulphur and methylated spirits and placed them in cases containing water and then ignited the buckets for fumigating the hold. After doing so one of the men went back carrying a tin of methylated spirits and evidently went too close to the burning buckets as the spirits exploded, injuring him severely.	...	1
Total					1	1

## Summary of accidents during the year 1906.

Kind of explosive or dangerous and inflammable substance.	ACCIDENTS CAUSING LOSS OF LIFE AND BODILY INJURY.			Accidents not causing loss of life, or bodily injury.	Total number of accidents.
	Number of accidents.	Number of Persons			
		Killed.	Injured.		
EXPLOSIVES					
Gunpowder . . . . .	13	21	28	...	13
Dynamite . . . . .	2	1	2	...	2
Fireworks . . . . .	11	4	14	...	11
TOTAL . . . . .	26	26	44	...	26
PETROLEUM.					
Petroleum generally . . . . .	6	9	3	4	10
TOTAL . . . . .	6	9	3	4	10
CHEMICALS.					
TOTAL . . . . .	...	..	...	...	...
MISCELLANEOUS.					
TOTAL . . . . .	2	1	1	1	3
TOTAL . . . . .	2	1	1	1	3
GRAND TOTAL . . . . .	34	36	48	5	39

# APPENDIX D.

Detailed statement showing the number of accidents and persons killed and injured during the seven years 1900-1906.

YEAR.	GUNPOWDER.			DYNAMITE AND OTHER NITRO-COMPOUND BLASTING EXPLOSIVES.			AMMUNITION.			FIREWORKS.		
	No. of accidents.	Persons killed.	Persons injured.	No. of accidents.	Persons killed.	Persons injured.	No. of accidents.	Persons killed.	Persons injured.	No. of accidents.	Persons killed.	Persons injured.
1900 . .	5	22	5	3	..	4	...	...	...	8	4	9
1901 . .	9	8	10	7	3	14	...	...	...	12	12	18
1902 . .	10	8	8	2	1	4	...	...	...	25	22	40
1903 . .	5	9	1	7	5	18	...	...	...	20	8	26
1904 . .	11	25	30	5	3	10	1	...	1	13	10	9
1905 . .	7	6	3	10	6	19	...	...	...	15	13	26
1906 . .	13	21	28	2	1	2	...	...	...	11	4	14
TOTAL .	60	99	85	36	19	71	1	...	1	104	73	142
AVERAGE .	8	14	12	5	3	10	1	...	1	15	10	20

YEAR.	PETROLEUM.			CHEMICALS.			MISCELLANEOUS.		
	No. of accidents.	Persons killed.	Persons injured.	No. of accidents.	Persons killed.	Persons injured.	No. of accidents.	Persons killed.	Persons injured.
1900 . .	3	14	...	6	1	11	...	...	...
1901 . .	6	21	3	4	1	1	...	...	...
1902 . .	3	7	1	5	2	2	2	4	...
1903 . .	9	13	14	2	6	3	...	...	...
1904 . .	8	42	10	4	...	9	5	...	1
1905 . .	12	7	13	...	...	...	...	...	...
1906 . .	10	9	3	...	...	...	3	1	1
TOTAL .	51	113	44	21	10	26	10	5	2
AVERAGE .	7	16	6	3	1	4	1	5	2

## APPENDIX E.

Comparative Statement showing number of accidents and persons killed and injured during the seven years 1900 to 1906.

YEARS.						ACCIDENTS CAUSING LOSS OF LIFE OR BODILY INJURY.			Accidents not causing loss of life or bodily injury.	Total number of accidents.
						No. of accidents.	Number of persons.			
							Killed.	Injured.		
1900	.	.	.	.	.	23	41	29	2	25
1901	.	.	.	.	.	32	45	46	6	38
1902	.	.	.	.	.	42	44	55	5	47
1903	.	.	.	.	.	35	41	62	8	43
1904	.	.	.	.	.	40	80	70	7	47
1905	.	.	.	.	.	40	32	61	4	44
1906	.	.	.	.	.	34	36	48	5	39
TOTAL						246	319	371	37	283
AVERAGE						35	45	53	5	40

## APPENDIX F.

Statement showing the import of explosives by sea into British India from other countries in the year 1906.

	IMPORTS IN 1906.					
	Bengal.	Bombay.	Sind.	Madras.	Burma.	TOTAL.
<b>QUANTITY.</b>						
Gunpowder, black . . . lbs.	60,401	77,527	3,750	25,675	..	168,353
Do. smokeless . . . "	5,450	2,300	30,800	1,195	..	39,745
Dynamite . . . "	8,400	...	23,697	280,110	40,000	352,207
Blasting Gelatine . . . "	...	4,000	...	902,400	...	906,400
Gelignite or Gelatine Dynamite . . "	12,544	36,000	...	84,050	...	132,594
Monobel powder . . . "	...	...	...	2,000	...	2,000
Other nitro-compound explosives . . "	72,921	...	...	...	..	72,921
Detonators . . . No.	...	100,000	...	5,436,000	...	5,536,000
Fireworks . . . lbs.	...	2,357,147	18,416	28,125	6,700	2,410,388
<b>TOTAL . lbs.</b>	<b>159,716</b>	<b>2,476,974</b>	<b>76,663</b>	<b>1,324,555</b>	<b>46,700</b>	<b>4,084,608</b>
<b>TOTAL . No.</b>	<b>...</b>	<b>100,000</b>	<b>...</b>	<b>5,436,000</b>	<b>...</b>	<b>5,536,000</b>
<b>VALUE IN RUPEES.</b>						
Gunpowder, black . . . Rs.	50,110	39,967	1,490	12,889	...	1,04,456
Do. smokeless . . . "	16,386	8,706	39,528	3,345	...	67,965
Dynamite . . . "	6,755	...	10,765	42,945	32,580	93,045
Blasting Gelatine . . . "	...	3,790	...	8,51,385	...	8,55,175
Gelignite or Gelatine Dynamite . . "	10,125	23,625	...	66,570	...	1,05,320
Monobel powder . . . "	...	...	...	1,585	...	1,585
Other nitro-compound explosives . . "	43,794	...	...	...	...	43,794
Detonators . . . "	937	1,560	...	1,05,215	...	1,07,712
Fireworks . . . "	123,506	5,16,707	8,829	7,840	4,580	5,61,462
<b>TOTAL . Rs.</b>	<b>1,51,613</b>	<b>5,99,355</b>	<b>60,612</b>	<b>10,91,774</b>	<b>37,160</b>	<b>19,40,514</b>

## APPENDIX G.

Comparative Statement showing the import of explosives by Sea into British India from other Countries during the years 1901 to 1906.

IMPORTS IN						
	1901.	1902.	1903	1904.	1905.	1906.
Gunpowder, black . . . lbs.	178,259	211,035	272,423	473,925	202,751	168,353
„ smokeless . . . „	17,379	26,605	31,004	48,246	45,125½	39,745
Dynamite . . . „	355,080	189,896	416,480	149,968	249,968	352,207
Blasting Gelatine . . . „	610,000	725,000	843,432	895,040	558,200	906,400
Gelignite or Gelatine Dynamite . „	61,950	50,000	22,096	55,048	123,048	132,594
Monobel Powder . . . „	...	..	...	...	...	2,000
Other Nitro-Compound Explosives . „	125,529	107,071	222,104	130,811	109,475	72,921
Detonators . . . . No.	2,679,000	3,297,509	4,388,400	3,020,000	1,797,000	5,536,000
Fireworks . . . . lbs.	833,268	1,147,223	1,971,317½	2,264,162	1,661,229	2,410,388
<b>TOTAL . . lbs.</b>	<b>2,181,465</b>	<b>2,456,830</b>	<b>3,778,856½</b>	<b>4,017,200</b>	<b>2,949,796½</b>	<b>4,084,608</b>
<b>TOTAL . . No.</b>	<b>2,679,000</b>	<b>3,297,509</b>	<b>4,388,400</b>	<b>3,020,000</b>	<b>1,797,000</b>	<b>5,536,000</b>

## APPENDIX H.

Statement showing the quantity of dangerous and non-dangerous petroleum imported by sea into British India during the year 1906.

	Dangerous.	Non-Dangerous.	
	Gallons.	Gallons.	
Balasore . . . . .	..	26,200	
Chandbali . . . . .	...	405,000	
Chittagong . . . . .	...	1,822,051	
Calcutta . . . . .	...	20,342,078	
Bombay . . . . .	184,243*	17,402,913	*Includes composition paint and rubber solution.
Sind . . . . .	9,795	5,007,932	
Madras . . . . .	38,104	6,956,459	
Burma . . . . .	...	1,156,179	
TOTAL .	232,142	53,118,812	

Statement showing the quantity of dangerous and non-dangerous petroleum produced in Assam and Burma during the year 1906.

	Dangerous.	Non-Dangerous.	
	Gallons.	Gallons.	
Assam . . . . .	21,855	1,890,942	
Burma . . . . .	125,356,400	95,848,500	
TOTAL .	125,378,255	97,739,442	

## APPENDIX 1.

## DEPARTMENT OF EXPLOSIVES.

## NOTIFICATION.

Dated Calcutta, the 27th March 1907.

No. 517.—With reference to Notification No. 4694—3-12, dated the 4th September 1905, of the Government of India, Department of Commerce and Industry, publishing amendments made in the rules to regulate the transport and importation of explosives, published with the like Notification No. 5528, dated the 11th October 1901, the following list of "authorized explosives" referred to in rule 2 (1) of the above rules is published for general information:—

## LIST OF AUTHORIZED EXPLOSIVES.

The following explosives are at present authorized for importation into British India for general sale:—

## Class 1.—GUNPOWDER.

GUNPOWDER.

## Class 2.—NITRATE MIXTURE.

AMMONAL.

RIPPLENE.

## Class 3.—NITRO-COMPOUND.

Every explosive in this class and every explosive ingredient thereof shall be so thoroughly purified and otherwise of such character as to satisfy a test known as the heat test, and specified in Schedule A of Home Department Notification No. 5529, Public, dated the 11th October 1901.

*Division 1.*

ALBIONITE.

AMBERITE NO. 1.

BALLISTITE.

BLASTING GELATINE.

CARBONITE.

CELTITE.

CORDITE.

CORDITE, M. D.

DYNAMITE.

GELATINE DYNAMITE NO. 1.

GELATINE DYNAMITE NO. 2, OR GELIGNITE.

MONOBEL POWDER.

PHENIX POWDER.

Provided that every explosive in this division shall be of such character and consistency as not to be liable to liquefaction or exudation.

*Division 2.*

AMBERITE NO. 2.

AMMONITE.

COOPPAL'S POWDER.

E. C. SPORTING POWDER.

EMPIRE POWDER.

GUNCOTTON.

HENRITE.

SCHULTZE GUNPOWDER.



KYNOCH'S SMOKELESS SPORTING POWDER.

NEGRO POWDER.

PICRIC ACID.

PICRIC POWDER.

RIFLEITE.

ROBURITE.

S. R. POWDER.

S. S. POWDER.

SMOKELESS POWDER.

SMOKELESS BLASTING POWDER.

Class 4.—CHLORATE MIXTURE.

*Nil.*

Class 5.—FULMINATE.

*Nil.*

Class 6.—AMMUNITION.

*Division 1.*

SAFETY FUZES FOR BLASTING.

SAFETY ELECTRIC FUZES.

PERCUSSION CAPS.

RAILWAY FOG SIGNALS.

SAFETY CARTRIDGES.

*Division 2.*

CARTRIDGES FOR CANNON, SHELLS, MINES, BLASTING, OR OTHER LIKE PURPOSES.

CARTRIDGES FOR SMALL ARMS WHICH ARE NOT SAFETY CARTRIDGES.

ELECTRIC FUZES.

FUZES FOR BLASTING WHICH ARE NOT SAFETY FUZES.

FUZES FOR SHELLS.

TUBES FOR FIRING EXPLOSIVES.

WAR ROCKETS.

*Division 3.*

CARTRIDGES FOR SMALL ARMS WHICH ARE NOT SAFETY CARTRIDGES.

DETONATORS.

ELECTRIC DETONATORS.

FUZES FOR BLASTING WHICH ARE NOT SAFETY FUZES.

FRICTION TUBES.

FUZES FOR SHELLS.

FUZES FOR FIRING EXPLOSIVES.

Class 7.—FIREWORK.

*Division 1.*

*Nil.*

*Division 2.—Manufactured Fireworks.*

MANUFACTURED FIREWORKS.

AMORCES.

CHINESE CRACKERS.

C. A. MUSPRATT-WILLIAMS, *Major, R.A.*,

Chief Inspector of Explosives in India,

DEPARTMENT

NOTICE

Explosives

D.

In exercise of the powers conferred by section 178 of the Explosives Act, 1884 (IV of 1884), the Governor-General in Council has made the following amendments in the Rules published with the Government of India in the Department of Commerce and Industries, No. 4-10 (Explosives), dated the 2nd October 1905, namely:—

In section III for the word "exception" the word "excepted" is substituted, and the following clause shall be added, namely:—

(b) Picric Acid thoroughly mixed with not less than three times its own weight of—

- (i) anhydrous sulphate of soda,
- (ii) crystallized sulphate of soda, when packed in hermetically closed packages, or
- (iii) potash alum,

shall be exempt from being deemed to be an explosive within the meaning of the said Act.

W. L. HARVEY,  
*Secretary to the Government of India.*

KYNOCH'S SMOKELESS SPORTING POWDER.

NEGRO POWDER.

PICRIC ACID.

PICRIC POWDER.

RIFLEITE

ROBURITE.

S. R. POWDER.

S S. POWDER.

SMOKELESS POWDER.

SMOKELESS BLASTING POWDER.

INDUSTRY.

Class 4 — CHLORATE  
Nil CATION.

Class 5 a, the 1st June 1906.

Notification of the Government of India in the Home  
dated 11th August 1899, and in exercise of the powers  
of the Indian Explosives Act, 1884 (IV of 1884), the  
Council is pleased hereby to declare that acetylene when  
subject to a pressure greater than  $1\frac{1}{2}$  atmospheres shall be deemed  
within the meaning of the said Act:

That, subject to the conditions hereinafter specified, acetylene,  
mixture with oil-gas, shall not be deemed to be an explosive within the  
scope of the said Act, when under compression—

- (1) The acetylene shall be generated only by the Atkins Dry Process.
- (2) The proportion of acetylene shall not exceed fifty parts by volume  
in every one hundred parts of the mixture of acetylene and oil-gas.
- (3) The acetylene and oil-gas shall be mixed together in a chamber or  
vessel before the gases are subjected to compression.
- (4) The mixture shall not be compressed to a pressure exceeding one  
hundred and fifty pounds per square inch.

W. L. HARVEY,

Secretary to the Government of India.

